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CNS. 322 (Revised 1963)

7530-21-562-1292

See Q.R.C.N. Art. 48.54, 45.47, 48.31;
71.4803, 48.32, 48.22, 48.51.

This Log when completed is to be transmitted to the Senior Officer in Command for inspection. Upon return it is to be retained in the ship for reference. Completed Logs shall be forwarded in batches of twelve bound in CNS 321B to Naval Records Centre, Sydney, N.S., in accordance with QRCN article 48.54.

HMCS PROTECTEUR

Class of Ship AOR

SHIP'S LOG

FOR

Month of JANUARY 1973

Days at Sea	17
Days in Harbour	14
Total Distance Run	5376.4

[Signature]
Navigating Officer.

[Signature]
Captain.

[Signature]
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.

BEAUFORT WIND SCALE AND CORRELATIVE SEA DISTURBANCE TABLE

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

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

NOTES

(1) The Approximate Equivalent Sea Disturbance Table is only intended as a guide to show roughly what may be expected in the open sea remote from land. It should never be used in the reverse way, that is for logging or reporting the state of the sea. In enclosed waters, or when near land with an off-shore wind, wave heights and lengths will be smaller.

(2) Sea Waves are waves caused by the present wind. Swell Waves are waves originally generated at a distance from the observer and, in general, travel in a direction differing from that of the present wind.

(3) The Height of a Sea or Swell Wave is the vertical distance of the crest above the trough.

VISIBILITY CODE (VV)

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

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

HMCS MAPLELEAF

FRI DAY

1st OF MARCH

Time	Zone Suffix	Log (Stating type) Electro-magnetic	Distance Run Miles and Tenths	Mean 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				50	Var	Var	Var	Var	25°W												
1600	+4	0197.1	2.0							5	320	7	-	-	-	98	01	995.0	17.2	15.6	13.9
1700																					
1800										3	345	3	-	-	-	98	01	997.0	15.6	15.0	13.9
1900																					
2000	+4									0	350	2	-	-	-	98	01	999.5	15.6	15.0	13.9
2100																					
2200																					
2300																					
2400	+4									0	000	2	-	-	-	98	00	1000.0	15.0	14.4	13.9

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	200.9	<p>Starboard and 1st of Port Watches.</p> <p>CPO & PD 1630 - 0755 Tuesday.</p> <p>LS & below 1640 - 0745 "</p> <p>OSUT 1640 - 0100 "</p> <p>WK 1640 - 1015 "</p>	1410	<p>Anchor</p> <p>Anglican Church Steeple 348°</p> <p>← Dominion Coal Jetty 019°</p> <p>→ Old Railway Pt. 106°</p> <p>Careening Pt. Br. 1000695</p>

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 - $\frac{1}{2}$ c 160°. 0221 - $\frac{1}{2}$ c 153°. 0229 - $\frac{1}{2}$ c 159° sp. 10 kts. SSD secured.

0230 - Reverted to NBCD 3. 0242 - $\frac{1}{2}$ c 175° sp. 15 kts. 0249 - $\frac{1}{2}$ c 156°.

0310 - $\frac{1}{2}$ c 101° sp. 18 kts. 0326 - Outer Automatic Buoy \perp pt. 1.1 m. (Ra) $\frac{1}{2}$ c 083°

0340 - { Sambre Is. Lt. 238°
Devils Is. Lt. 310°
Shutts Is. 338°

0450 - { Egg Is. Lt. 350°, 10.45 m. (Ra.)
Egg Is. Buoy 000°, $\frac{5.7^{08}}$
 $\frac{5.2}{5.2}$ m. (Ra.) $\frac{1}{2}$ 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 $\frac{1}{2}$ 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). s.19(1) 1030 Cape Canso brg. 287° - 17.8 m. (Ra.)

1142 - One pair binoculars Patt. # 1900 A., Serial 58274, lost overboard.

1203 - $\frac{1}{2}$ 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 \perp pt. 1 m. (Ra.) $\frac{1}{2}$ 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. Co. & sp. as reg. to berth alongside.

1530 - Secured alongside Sydney & Louisburg Railway Wharf pt. side to. Reverted to 2 hour notice for steam.

1532 - SSD secured, reverted to NBCD 4.

1600 - ABBN1 - A.N. OTHER, 1234-H. landed to Louisburg General Hospital.

1615 - Cleared Lower Deck. Read Warrant # 72. 1630 Duty watch to fire drill.

1754 - Sunset.

1800 - Shore patrol landed.

1905 -

2300 - RCAF aircraft reported missing 50 m. SE. Louisburg. Recalled libertymen.

2330 - Came to immediate notice for steam.

2345 - Shore patrol returned on board.

J.P.

J.C.

R.P.

P.T.

R.P.

R.P.

R

Position	Latitude N.	Longitude W.	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	44° 53' 3"	61° 29' 1"	0758 (+4) FIX.				
1200	45° 25' 4"	59° 58' 8"	1159 (+4) (Ra.)	0145	12' 5"	16' 6"	
2000	'	'		1425	12' 3"	16' 4"	

HMCS PROTECTEUR

MONDAY

1st OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	155	15				95 95	21	1039.0	7.6	7.3	
0500																					
0600																					
0700																					
0800										8	160	15				95	21	1040.0	8.2	7.9	
0900																					
1000																					
1100																					
1200	++									8	220	35 15				96	60	1030.0	8.0	8.0	
1300																					
1400																					
1500																					
1600										8	300	35 15				96	65	1025.0	8.9	8.7	
1700																					
1800																					
1900																					
2000										8	200	15				97	20	1000.0	8.3	7.8	
2100																					
2200																					
2300																					
2400										4	CALM					98	01	1006.0	2.8	2.2	

Distance run through the Water Midnight to Midnight

Leave Granted to Ship's Company

Anchor Bearings

PERSONNEL NRFD FROM 0900 ~~SECURE~~ MON
UNTIL 0755 TUES.

1973 FROM

TO

, OR AT HALIFAX,

REMARKS

Initials of the Officer of the Watch

0750 - SUNRISE
COLOURS - 0800

DAE

1530 - EMERGENCY PARTY EXERCISED - CHEMOX AND FIXED FIREFIGHTING SYSTEMS DEMONSTRATED

1645 - SUNSET

1900 - ROUNDS CORRECT

RWB

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

HMCS PROTECTEUR

TUES DAY

2ND OF JANUARY

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	CAAM					98	02	1006	3.3	2.2		
0500																						
0600																						
0700																						
0800										0	CAAM					95	02	1006	3.3	2.8		
0900																						
1000																						
1100																						
1200	+4									2	290	5				98	02	1003.0	4.4	3.9		
1300																						
1400																						
1500																						
1600										7	135	10				98	03	1003.0	2.8	3.9		
1700																						
1800																						
1900																						
2000										7	135	15				98	02	1004.0	2.8	2.8		
2100																						
2200																						
2300																						
2400										7	000	20				98	02	1005.0	0.0	0.0		

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

1973

FROM

TO

, OR AT HALIFAX N.S.
~~JULY 4 &~~

REMARKS

Initials
 of the
 Officer
 of the
 Watch

0750 - SUNRISE

0800 - COLOURS - HANDS EMPLOYED AT CLEANING STATIONS

RAB

0930 Hands to Emergency Stns - fire alarm activated from Gas Turbine Compartment
 0942 Secured Emergency Stns - false alarm.

1646 Sunset.

1805 - Exercised Emergency Party at fire stns.

2000 - Rounds covered

[Signature]

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

HMCS PROTECTEUR

WEDNESDAY

3RD OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										7	000	25	-	-	-	98	02	1010.0	-5.0	-5.0	
0500																					
0600																					
0700																					
0800										7	020	30	-	-	-	98	02	1009.0	-6.2	-6.2	
0900																					
1000																					
1100																					
1200	44									2	050	15	-	-	-	98	02	1016	5.6	5.6	
1300																					
1400																					
1500																					
1600										0	000	10	-	-	-	98	02	1016	-1.1	-1.1	
1700																					
1800																					
1900																					
2000										0	020	12	-	-	-	98	02	1020	5.0	5.0	
2100																					
2200																					
2300																					
2400										0	020	12	-	-	-	98	02	1021	5.0	5.0	

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

1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS

Initials
of the
Officer
of the
Watch

0750 - SUNRISE

0800 - Colours. HANDS EMPLOYED AT CLEANING STATIONS.

0900 - HANDS Employed by Departments.

J.P.W.

1315 - HANDS Employed by Departments.

1600 Secure.

1647 - SUNSET

1815 - EXERCISED EMERGENCY STATIONS. FIRE IN GALLEY.

1920 - ROUNDS CORRECT

J.P.W.

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

HMCS PROTECTEUR

THURS, DAY

4TH 5TH OF JANUARY

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	020	10	-	-	-	98	02	1021	7.8	7.8		
0500																						
0600																						
0700																						
0800										0	030	5	-	-	-	98	02	1019	7.2	7.2		
0900																						
1000																						
1100																						
1200	44									8	CALM	-	-	-	98	02	1027	7.2	7.2			
1300																						
1400																						
1500																						
1600										8	CALM	-	-	-	98	02	1064	-1.1	-1.1			
1700																						
1800																						
1900																						
2000										8	150	10	-	-	-	96	75	1064	-0.6	-0.6		
2100																						
2200																						
2300																						
2400										8	150	10	-	-	-	97	69	995	2.2	2.2		

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

19 72.

FROM

TO

, OR AT HALIFAX N.S.

Document disclosed under the Access to Information Act / Document divulgué en vertu de la Loi sur l'accès à l'information

REMARKS

Initials of the Officer of the Watch

0600 09 04 50

0620 EXERCISED EMERGENCY STATIONS - FIRE IN BOILER ROOM (SEA TRAINING STAFF)

0750 SUNRISE
0800 COLOURS

0900 CPL W.T. BAILEY RESERVE REPORTED ON BOARD
0923 SGT. J. R. DUELLETTE RESERVE REPORTED ON BOARD
~~0933 CAPTAIN ON BOARD EW~~

JRW

0945 PTE DILLARD REPORTED ON BOARD
1000 CAPTAIN ASHORE EW

1010 AB EATMAN, AB MCGOWAN, AB WITTAKER RESERVES REPORTED ON BOARD
1145 CAPTAIN ON BOARD EW

1150 PTE LIVINGSTONE REPORTED ON BOARD
1215 PTE COSTIN, PTE PARADIS REPORTED ON BOARD

JRW

~~1405 CAPTAIN ASHORE EW~~

1555 ^{SECURE} BROW OPENED EW

1646 SUNSET HDL ON

JRW

1930 ROUNDS COLLECT

1945 FIRE STATIONS

JRW

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					EXTENDED
1200	° ' "	° ' "					
0000	° ' "	° ' "					

HMCS PROTECTOR

FRI DAY

5th OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	350	20	-	-	-	98	70	992	0.6	1.7	
0500																					
0600																					
0700																					
0800										4	290	15	-	-	-	98	01	992.5	-4.4	-4.4	
0900																					
1000																					
1100																					
1200	+4									6	090	10				96	70	992	.6	-1.0	
1300																					
1400																					
1500																					
1600										7	350	15				98	02	992	1	0.6	
1700																					
1800																					
1900																					
2000										6	350	8				98	02	993	1.7	0	
2100																					
2200																					
2300																					
2400										8	280	15				98	03	992	0	0	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PERSONNEL NRFD FROM 1200 FRI TILL 0730 MON			

19 ⁷³ ~~72~~ _{EW} FROM

TO

OR AT **HALIFAX**

REMARKS

Initials of the Officer of the Watch

0750 SUNRISE ~~WED~~ ^{WED} ~~DEF~~
 0800 COLOURS - HANDS EMPLOYED AT CLEANING STATIONS
 0900 HANDS EMPLOYED BY DEPTS.

1200 SECURE

1649 SUNSET

1930 - ROUNDS COMPLETE

[Handwritten initials]

[Handwritten initials]

[Handwritten initials]

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

HMCS PROTECTOR

SATUR DAY

6th OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										8	350	20				98	70	992	-1	-1		
0500																						
0600																						
0700																						
0800	4									4	290	15				98	01	992	-4.4	-4.4		
0900																						
1000																						
1100																						
1200	4									4	290	20				98	01	989.5	-6.1	-6.1		
1300																						
1400																						
1500																						
1600										8	280	18				98	02	989.5	-5.6	-5.1		
1700																						
1800																						
1900																						
2000										8	280	20				98	72	989.0	-23.9	-		
2100																						
2200																						
2300																						
2400										6	280	20				98	02	989.0	-23.9	-		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings
	PERSONNEL N.R.F.D FROM 0900 SATURDAY UNTIL 0755 MONDAY		

19 ⁷³ ~~7960~~

FROM

TO

, OR AT HALIFAX

REMARKS

Initials
of the
Officer
of the
Watch

0750 SUNRISE
 0800 COLONIES - DUTY WATCH EMPLOYED AT CLEANING STATIONS
 10 - SECURE

[Handwritten initials]

EXERCISED EMERGENCY PARTY
 150 - REAL SUNSET

ROUNDS CORRECT

[Handwritten initials]

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

HMCS

PROTECTEUR

SUN DAY

7th OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										4	280	25				98	01	988.6	-11.7	-11.7		
0500																						
0600																						
0700																						
0800										7	280	20				97	01	988.0	-11.0	-11.0		
0900																						
1000																						
1100																						
1200	44									6	280	15				98	01	990	-10.0	-10.0		
1300																						
1400																						
1500																						
1600										8	180	20				98	01	993	7.8	7.8		
1700																						
1800																						
1900																						
2000	40									8	180	15				98	01	991	73.3	13.3		
2100																						
2200																						
2300																						
2400										0	150	15				98	01	999	8.9	8.9		

Distance run through the Water Midnight to Midnight

Leave Granted to Ship's Company

Anchor Bearings

PERSONNEL NRED FROM ~~SEVEN~~ SUN UNTIL 0730 MON

HMCS PROTECTEUR

MON DAY

8th OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	150	20				97	03	1002	-10.0	-10.0	
0500																					
0600																					
0700																					
0800										8	150	20				97	03	1004	0.6	0.6	
0900																					
1000																					
1025																					
1100			2.9 3.2		VAR	VAR	VAR	VAR	22 1/2 W												
1200	+4	U/S	13.8	69.4	VAR 135	VAR 135	VAR 157	1/2 E	22 1/2 W	6	320	12	1	320	2	97	01	1010.0	9.4	9.4	5.6
1210					135	135	157	1/2 E	22 1/2 W												
1300		U/S	18.5	94.6	080	080	102	1/2 E	22 1/2 W												
1400		U/S	18.8	97.8	080	080	102	1 E	23 W												
1500		4686.00	18.8	97.8	080	080	102	1 E	23 W												
1600	+4	4704.00	18.0	94.2	080	080	103	1/2 E	23 1/2 W	7	295	22	3	280	2	98	02	1011.0	7.2	7.2	3.9
1634					080	080	103	1/2 E	23 1/2 W												
1637					330	330	354	1/2 W	23 1/2 W												
1700		4716.40	16.2	81.9	080	080	103	1/2 E	23 1/2 W												
1706					080	080	103	1 E	24 W												
1722					330	330	354	1 E	24 W												
1800	+4	4734.20	19.0	95.1	080	080	103	1 E	24 W	8	295	18	3	280	2	97	02	1010.0	7.2	7.2	3.9
1900		4748.62	19.4	97.3	080	080	103	1 E	24 W												
2000	+4	4760.56	18.9	97.0	080	080	103	1 E	24 W	8	295	18	3	280	3	96	02	1010.0	9.4	9.4	3.9
2100		4783.05	19.0	97.1	080	080	105	Ø	25 W												
2200		4797.78	19.3	97.5	080	080	105	Ø	25 W												
2300		4815.30	18.8	96.8	080	080	105	Ø	25 W												
2400	+4	4832.51	18.8	97.4	080	080	105	Ø	25 W	8	295	22	3	270	4	97	02	1007.0	6.7	6.7	4.4

Distance run through the Water Midnight to Midnight

240.2

Leave Granted to Ship's Company

Anchor Bearings

1973

FROM HALIFAX

TO PORTSMOUTH U.K. OR AT SEA

REMARKS		Initials of the Officer of the Watch
0020 - ONE MAN FROM HMCS MONTCALM ONBOARD		
0750 - SUNRISE		
0800 - COLOURS - HANDS EMPLOYED AT CLEANING STATIONS		
0815 - Palat 0810 - COMMODORE A.L. COLLIER DESCENDING BOARD 0835 - COMMODORE A.L. COLLIER ROSECO ASTHORE		
0900 - PART SHIP HANDS CLOSED UP		
0915 - Pilot Capt Rose onboard 0935 - SSD, cable party closed up. Assumed CondY 0945 - Tugs alongside 1025 - Unison Main Engines 1025 - Slipped and provided - 101 spas req to leave harbour 1028 - EM log 4/5. 1042 - Tugs shipped Capt Rose ashore 1113 - Raigere Beach Lt No 1 Pt. 1145 - Secured SSD at 135 sp 18 kts 1210 - Alc 080 1211 - Sp 19 kts		
		1344 { 44° 26.7' N 63° 14.5' W Decca
		1423 { 44° 32.0' N 62° 29.8' W Decca
1411 Exercised Emergency Stations. 1428 Exercised Liferaft Stations. 1440 Secured Liferaft Stations HMCS MARGAREE 1507 - joined - took stn. 260-1000' 1520 - RAS SSD closed up. 1530 ME commenced RAS approaches		
1600 Hands to Flying Stns.		1538 { 44° 35.2' N 61° 59.5' W Decca
1615 - CEASED RAS APPROACHES, SECURED RAS SSD 1634 - Alc 330 1635 - HELD LAUNCHES 1636 - SECURED FLYING STATIONS 1637 - Alc 080		1638 - Sp 17 1637 - SECURED RESCUE STNS 1640 - SUNSET, NAV LTS, SW ON 1653 { 44° 38.4' N 61° 36.7' W DECCA 1649 - Sp 19 1650 - EXERCISED RESCUE STATIONS
1703 - HANDS TO FLYING STATIONS 1706 - Alc 330 1721 - HELD RECOVERED		1722 - Alc 080 1726 - SECURED FLYING STATIONS 1745 { 44° 44.5' N 61° 24.9' W DECCA
1900 - COMMENCED RUN OF ROAD QUINCE 1930 - COMPLETED RUN OF ROAD QUINCE		1809 { 44° 45.6' N 61° 18.5' W DECCA 1925 { 44° 50.0' N 60° 47.8' W DECCA
2235 - Exercised Steering Gear Breakdown 2300 - Completed Steering Gear Breakdown Exercise		2107 { 44° 54.0' N 60° 05.2' W DECCA 2210 { 44° 56.6' N 59° 39.5' W DECCA 2316 { 44° 59.1' N 59° 12.6' W DECCA

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					
1200	° ' "	° ' "		0800(+4)	31' 5"	32' 4"	
2000	44° 50.5' N	60° 33.2' W	1925 DECCA				STEAMING

HMCS PROTECTEUR

TUES DAY

9TH OF JANUARY

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		4848.30	18.8	97.0	080	080	105	1/2 E	25 1/2 W															
0200		4863.47	18.8	97.0	080	080	105	1/2 E	25 1/2 W															
0300		4881.55	15.1	96.9	070	070	095	1/2 E	25 1/2 W															
0400	+4	4897.97	19.3	96.9	070	070	095	1/2 E	25 1/2 W	7	295	20	4	270	3	97	02	1006.4	6.1	6.1	4.4			
0500		4912.40	19.3	96.8	070	070	095	1/2 E	25 1/2 W															
0600		4931.18	19.3	96.8	070	070	095	1/2 E	25 1/2 W															
0700		4947.95	19.3	96.7	070	070	095	1/2 E	25 1/2 W															
0800	+4	4960.37	19.0	96.0	070	070	095	1/2 E	25 1/2 W	8	135	35	2	130	4	97	02	1002.5	5.0	5.0	3.9			
0835					070	070	095	1/2 E	25 1/2 W															
0859					095	095	120	1/2 E	26 1/2 W															
0900		4975.60	18.2	94.5	290	290	316	0	0															
1000		4987.75	16.1	83.0	VAR	VAR	VAR	VAR	26 1/2 W															
1100		5001.35	17.5	91.3	VAR	VAR	VAR	VAR	26 1/2 W															
1125					070	070	096	1/2 E	26 1/2 W															
1200	+4	5017.25	18.8	96.5	110	110	136	1/2 E	26 1/2 W	7	275	30	2	280	6	98	02	999.5	4.4	4.4	3.9			
1300		5032.87	18.8	96.6	070	070	096	1/2 E	26 1/2 W															
1400		5046.79	17.8	90.6	VAR	VAR	VAR	VAR	26 1/2 W															
1500		5061.15	18.0	92.0	VAR	VAR	VAR	VAR	26 1/2 W															
1600	+4	5071.35	12.5	61.4	100	100	126	1/2 E	26 1/2 W	7	270	30	3	280	6	98	02	1000	4.4	4.4	1.7			
1700		5081.88	15.2	76.7	VAR	VAR	VAR	VAR	26 1/2 W															
1800	+4	5099.58	18.2	98.2	070	070	098	1 1/2 E	26 1/2 W	8	270	30	8	280	6	97	26	1009.9	5.0	5.0	3.3			
1900		5114.35	18.1	98.1	070	070	095	1 E	26 W															
2000	+4	5130.35	18.1	98.3	070	070	095	1 E	26 W	8	290	30	8	280	7	95	70	1000.5	5.0	5.0	5.0			
2100		5188.55	18.1	98.3	070	070	095	1/2 E	26 W															
2101					070	070	095	1/2 E	26 W															
2200		5163.17	18.2	98.4	075	075	100	1/2 E	26 W															
2300		5180.26	18.2	98.6	075	075	100	1/2 E	26 W															
2400	+4	5196.52	18.1	98.2	075	075	100	1/2 E	26 W	8	280	25	3	290	8	97	01	998.0	5.0	4.4	3.9			

Distance run through the Water Midnight to Midnight

431.9
412.6 W

Leave Granted to Ship's Company

Anchor Bearings

1973 FROM HALIFAX TO PORTSMOUTH U.K., OR AT

REMARKS		Initials of the Officer of the Watch
0839 Commenced Codex and Pubex. 0847. Fire Alarm activated in Bosni's Workshop and 3" R.U. magazine. Hands to Emergency Stations. 0858. Fire alarms triggered by steam leak. Secured Emergency Stations. 0115 Pubex completed. 0130 Codex completed.	0839 45° 03.2' N 58° 43.2' W Decca	
0820 a/c 070. 0823 Commenced Steering Gear Breakdown Exercise. 0855 Exercise completed.	0825 45° 16.1' N 58° 21.4' W Decca	
	0845 45° 12.1' N 57° 44.0' W Decca	
	0845 45° 16.1' N 57° 23.1' W Decca	A
0530 - EXERCISED STEERING GEAR BREAKDOWN - NUC LTS S/W ON 0600 - STEERING GEAR BREAKDOWN COMPLETE - NUC LTS S/W OFF	0525 45° 28.1' N 56° 13.0' W DECCA	
0721 - SUNRISE, NAV LTS SWITCHED OFF 0800 - HANDS EMPLOYED AT CLEANING STATIONS	0730 45° 42.3' N 53° 54.5' W DECCA	
0830 - FLYING STATIONS 0835 - A/c 095 0859 - A/c 290, Sp. 10	0832 { 45° 48.8' N DECCA { 55° 30.8' W	
0904 - HELO LAUNCHED 0905 - A/c 095 Sp. 19 0941 - A/c 290 Sp. 10	0947 - HELO LAUNCHED 0948 - STOOD DOWN FLYING STATIONS 0949 - A/c 070, Sp. 19	0934 { 45° 46.3' N DECCA { 55° 12.6' W
1006 - A/c 095 1008 - A/c 070 1029 - FLYING STATIONS	1043 - A/c 290, Sp. 10 1048 - HELO LAUNCHED PAS RECOVERED	1030 { 45° 49.9' N DECCA { 54° 56.1' W
1104 - STOOD DOWN FLYING STATIONS 1125 - A/c 110 TO AVOID CARGO SHIP ATLANTIC SQNG OUT OF STOCKHOLM 1130 - A/c 070	1049 - A/c 070 Sp. 19	1140 { 45° 56.0' N DECCA { 54° 35.0' W
		1251 { 46° 02.6' N DECCA { 54° 05.8' W
1343 - SP 14 1347 - a/c 100 1352 - SP 12	1355 - a/c 070 Sp 19	
1420 - Hands to Flying Stations 1430 - Hands to Replenishment Stations 1445 - RAS STD. closed up.	1447 - SP 12 1448 - a/c 300 1453 - Helo launched 1455 - a/c 100	1430 { 46° 10.1' N DECCA { 53° 29.3' W
1510 - Margaret alongside STD. 1514 - First line passed 1550 - Commenced pumping 1600 Winches hoist - commenced disconnecting Flying Stations		
1615 Emergency breakaway. 1617 ME stationed 165 - 1.0. 1620 a/c 300 to recover helo. 1623 Secured RAS stations. 1629 a/c 275. Recovered helo. 1630 a/c 070 Sp. 19. Secured Flying Strs.		1637 46° 10.5' N 53° 02.0' W Decca
		1734 46° 15.8' N 52° 39.7' W Decca
		1900 { 46° 23.2' N DECCA { 52° 04.0' W
		1940 { 46° 27.0' N DECCA { 51° 48.7' W
2101 - A/c 075		
2400 - CLOCKS ADVANCED 1 HOUR TO ZONE +3		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	45° 44.0' N	55° 45' W	0800 DECCA				STEAMING
1200	45° 59.8' N	54° 25.5' W	1200 DECCA				
2000	46° 30.1' N	51° 36.2' W	1940 DECCA				

HMCS PROTECTOR WEDNESDAY

10th OF JANUARY

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	+3																					
0200		5213.50	19.2	98.6	075	075	100	1°E	26°W													
0300		5229.80	19.1	98.3	075	075	101	Ø	26°W													
0400	+3	5246.15	18.7	97.0	075	075	102	2°W	25°W	6	265	18	3	280	5	97	02	999.0	-4.4	-4.4	3.3	
0500		5262.58	19.1	98.3	Ø75	Ø75	1Ø2	2W	25W													
0600		5279.7Ø	19.1	98.3	Ø75	Ø75	1Ø2	2W	25W													
0700		5295.Ø2	17.9	91.3	Ø75	Ø75	1Ø2	2W	25W													
0800	+3	53Ø8.1Ø	15.2	76.5	VAR	VAR	VAR	VAR	25W	8	29Ø	2Ø	Ø	27Ø	6	96	7Ø	999.Ø	-3.9	-3.9	2.2	
0900		5316.63	8.8	44.4	VAR	VAR	VAR	VAR	25°W													
0903					VAR	VAR	VAR	VAR	25°W													
0918					25Ø	25Ø	272°	2°W	25°W													
1000		U/S	17.9	89.7	Ø9Ø	Ø9Ø	115°	2°W	25°W													
1100		5331.58	19.1	98.5	VAR	VAR	VAR	VAR	25°W													
1110					VAR	VAR	VAR	VAR	25°W													
1121					28Ø	28Ø	3Ø5°	2°W	25°W													
1200	+3	5351.1Ø	18.1	9Ø.3	Ø7Ø	Ø7Ø	Ø92°	2°W	25°W	8	28Ø	2Ø	5	25Ø	5	95	7Ø	1000	-2.2	-1.7	4.4	
1300		5355.87	16.2	86.3	VAR	VAR	VAR	VAR	26°W													
1400		5372.85	14.2	73.4	Ø7Ø	Ø7Ø	Ø96	½°W	26½°W													
1500		5393.73	14.3	74.4	VAR	VAR	VAR	VAR	26½°W													
1600	+3	54Ø9.7	16.9	84.8	Ø7Ø	Ø7Ø	Ø96	½°W	26½°W	6	275	24	2	28Ø	6	97	Ø2	998.Ø	-2.2	-2.2	5.Ø	
1700		5421.8Ø	15.1	75.6	VAR	VAR	VAR	VAR	26½W													
1800	+3	544Ø.41	19.7	98.6	Ø7Ø	Ø7Ø	Ø96	½°W	26½W	5	27Ø	2Ø	2	28Ø	7	98	Ø1	1000	-3.3	-3.3	5Ø	
1900		5459.37	19.2	98.4	Ø7Ø	Ø7Ø	Ø96	1°W	25°W													
2000	+3	5479.15	19.2	98.4	Ø7Ø	Ø7Ø	Ø96	1°W	25°W	5	275	24	2	28Ø	6	98	Ø2	1000.Ø	-3.3	-3.3	66	
2100		5497.81	19.3	98.5	Ø7Ø	Ø7Ø	Ø96	1W	25W													
2200		5516.ØØ	19.5	98.7	Ø7Ø	Ø7Ø	Ø96	1W	25W													
2300		5536.Ø8	19.5	98.7	Ø7Ø	Ø7Ø	Ø96	1W	25W													
2400	+3	5554.63	19.5	98.7	Ø7Ø	Ø7Ø	Ø96	1W	25W	5	26Ø	22	3	27Ø	8	98	Ø2	999.1	-1.1	-1.1	11.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
404.8		

1973

FROM HALIFAX NS TO PORTSMOUTH UK, OR AT

REMARKS

Initials of the Officer of the Watch

0200 } 46°54'0N
DR } 49°37.6N

0430 Commenced Reluelex and Naucomex. 0500 Naucomex completed 0825 Reluelex completed.

0650 Encountered slush ice. Sp 5. 0655 Stationed ME 255° x 2000'

0700 Sp 10
0715 Sp 19. 0736 Entered broken pack ice. a/c 110° 0745 a/c 075° 0747 Sp 8.
0753 Sunrise 0800 Hands employed at cleaning stations.

0807 - a/c 110
0817 - a/c 150
0820 - HANDS TO FLYING STATIONS
0830 - a/c 250
0916 - LAUNCHED HELO 03
0918 - a/c 090
1000 - EM LOG REPORTED 0750
1002 - a/c 080
1004 - a/c 065

0824 - SP5
0832 - SP9
0833 - SP120
0837 - a/c 100
0846 - SP10
0854 - SP15

0941 - SP10
0949 - SP19
1000 - EM LOG U/S

1014 - a/c 270 EM LOG SERVICEABLE
1030 - CLEARED ALL ICE FORMATIONS

1103 - HANDS TO FLYING STATIONS
1104 - COMMENCED FPB EXERCISE
1110 - a/c 280 SP10
1200 - HANDS TO FLYING STATIONS
1205 - a/c 280 SP10
1200 - HELD RECOVERED
1304 - Sp 14
1310 - REPLENISHMENT STATIONS STOOD DOWN
FIRE IN MARGARET'S HANGAR
HANDS TO FLYING STATIONS
1401 - ME SLIPPED
1408 - Sp 19, STOOD DOWN REPLENISHMENT STATIONS
1420 - a/c 280, Sp 10
1525 - ME SLIPPED
1536 - ME STATIONED 1 MILE ON PT PORT BEAM
1520 - Sp 19, SECURED REPLENISHMENT STNS AND PASSEA 0 1558 - a/c 280 SP10

1119 - RECOVERED HELO 39
1120 - LAUNCHED HELO 39
1121 - a/c 070 SP 19
1210 - a/c 070, Sp 19
1218 - a/c 270, Sp 10
1232 - HELD RECOVERED
1235 - HELD LAUNCHING
1226 - a/c 070, Sp 19
1235 - STOOD DOWN FLYING STNS
1245 - HANDS TO REPLENISHMENT STATIONS
1300 - PASSEA 550 CLOSED U/S

1200 - HANDS TO FLYING STNS CEASED FPB EXERCISE.
1115 } 47°15'N
LORAN } 45°55'W

1316 - SECURED FLYING STATIONS
FIRE OUT ON ME
1326 - REPLENISHMENT STATIONS CLOSED UP
1423 - a/c 290
1425 - HELD LAUNCHING
1427 - a/c 070 Sp 19
1430 - REPLENISHMENT STNS CLOSED UP LORAN
1442 - ME ALONGSIDE PORT

1335 - ME ALONGSIDE PORT
1400 - HANDS TO FLYING STATIONS
1426 - FLYING STATIONS STOOD DOWN 1500 (47°38'N)
1430 - REPLENISHMENT STNS CLOSED UP LORAN (45°01'W)
1442 - ME ALONGSIDE PORT

1601 - a/c 280
1602 - a/c 070
1625 - a/c 280 Sp 10
1627 - SUNSET NAV LTS SW ON
1638 - HELD 39 RECOVERED
1639 - HELD 03 RECOVERED
1650 - HELD 03 LAUNCHED
1651 - FLYING STATIONS SECURED
1651 - a/c 070 Sp 19

2030 Commenced Nuclear Plotex. ME commenced EWEX.
2115 Exercise completed.

LORAN 48° 21'0N
2334 41° 51'0W

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	47° 16' N	47° 17' W	D.R.				
1200	47° 18.0' N	45° 28.0' W	LORAN/Echo Sounder/EP.				
2000	48° 08.0' N	43° 09.0' W	LORAN				STEAMING

HMCS PROTECTEUR

THURSDAY

11th OF JANUARY

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		5573.10	19.3	98.5	070	070	096	Ø	26°W															
0200		5592.44	19.4	98.6	070	070	096	Ø	26°W															
0300		5611.47	19.4	98.6	070	070	096	Ø	26°W															
0400	+3	5630.93	19.3	98.5	070	070	096	Ø	26°W	6	275	25	2	280	5	97	70	991.0	0.6	0.6	14.4			
0500		5649.10	19.1	98.3	070	070	096	½W	25½W															
0600		5667.94	19.4	98.7	070	070	096	½W	25½W															
0700		5687.33	19.3	98.6	070	070	095	Ø	25°W															
0800	+3	5705.30	19.3	98.5	070	070	095	Ø	25°W	6	270	20	4	280	6	97	02	993.0	1.7	1.7	10.6			
0900		5723.30	19.3	98.6	070	070	095	Ø	25°W															
0913					070	070	095	Ø	25°W															
1000		5738.52	15.3	76.6	095	095	125	Ø	25°W															
1023					095	095	125	Ø	25°W															
1100		5754.22	17.4	87.3	070	070	095	Ø	25°W															
1159					070	070	095	Ø	25°W															
1200	+3	5773.01	19.9	99.9	080	080	105	Ø	25°W	6	270	20	5	290	6	96	02	996.0	2.2	2.2	11.7			
1300		5791.25	19.7	99.9	080	080	104	½E	24½E															
1400		5805.60	15.2	71.2	080	080	104	Ø	24°W															
1500		5823.72	19.5	98.7	080	080	104	Ø	24°W															
1600	+3	5838.10	13.7	68.6	VAR	VAR	VAR	VAR	24°W	8	295	40	5	290	10	96	70	987.0	2.8	1.7	11.1			
1700		5856.67	19.9	99.2	Ø8Ø	Ø8Ø	105	1E	24°W															
1800	+3	5872.80	19.1	99.0	Ø8Ø	Ø8Ø	105	1E	24°W	7	295	40	8	300	12	96	72	989.0	2.8	1.9	11.1			
1900		5890.50	19.2	99.2	080	080	105	1°W	24°W															
2000	+3	5908.66	19.1	98.2	080	080	105	1°W	24°W	5 5	285	25	6	280	9	97	01	991.0	1.7	0.6	11.1			
2100		5926.10	18.9	96.4	080	080	105	1°W	24°W															
2200		5943.80	19.0	97.7	080	080	105	1°W	24°W															
2300		5962.60	19.3	99.6	080	080	105	1°W	24°W															
2330	+3				080	080	105	1°W	24°W	5	280	25	6	290	7	97	02	992.0	1.7	0.5	11.0			
2400		5970.21	19.3	99.6																				

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	448.3			

1973 FROM HALIFAX TO PORTSMOUTH-UK OR AT

REMARKS

Initials of the Officer of the Watch

0005 - COMMENCED BLOWING SOOT
 0040 - HE CEASED EWR, DECCA RADAR TO OPERATE
 0133 - COMPLETED BLOWING SOOT

0110 { 48°36.0'N
 LORAN { 410°06'0"W

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0725 - SUNRISE NAV LGS SWITCHED OFF.
 0755 - HANDS TO DIVISIONS

0700 { 49°09.0'N
 DR { 38°40.0'W

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0900 - RAS STATIONS B, 2+4 CLOSED UP
 0913 - A/C 095 SP 14
 0915 - RAS SSD CLOSED UP
 0940 - MARGARET ALONGSIDE PORT
 1017 - MARGARET SLIPPED
 1020 - RAS SSD AND STATIONS B, 2+4 SECURED
 1023 - A/C 070 SP 19

0830 { 49°20'N
 LORAN { 38°00'W

1025 { 49°20'N
 LORAN { 37°19'W

1159 - A/C 080

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1315 - LOST PORT BOILER, REV. 50 Sp. 10
 1314 - Sp. 14
 1350 - BOILER BACK ON LINE, Sp. 19

1455 - FIXING STATIONS

1517 - Sp. 10 1529 - A/C 080 Sp. 19 1541 - SUNSET, NAV. LGS. SWITCHED ON
 1518 - A/C 300 1536 - A/C 300 Sp. 10 1542 - A/C 080, Sp. 19
 1520 - HELD RECOVERED 1541 - HELD LAUNCHED 1548 - SECURED FIXING STATIONS

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1740 { 49°44.5'N
 { 34°08.0'W

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2000 { 49°53.8'N
 DR { 35°12.0'W

2040 { 49°55'N
 LORAN { 33°00'W

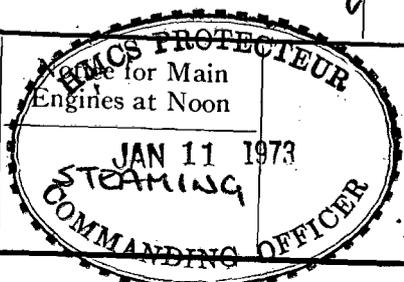
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2330 CLOCKS ADVANCED 1 HOUR TO ZONE +2

2323 { 50°04'N
 LORAN { 31°47'W

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Position	Latitude	Longitude	Depending on	Draught		
				Time	Forward	Aft
0800	49° 16.0' N	38° 14.5' W	0830 LORAN			
1200	49° 24.0' N	36° 58' W	1025 LORAN			
2000	49° 53.8' N	33° 12.0' W	2000 DR			



HMCS PROTECTEUR

FRI DAY

12th OF JANUARY

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 0100	+2	5978.75																				
0200		5997.42	19.2	99.1	085	085	110	1W	24W													
0300		6014.52	19.1	98.8	085	085	110	1W	24W													
0400	+2	6032.20	19.1	98.7	085	085	110	1W	24W	8	250	25	8	290	8	96	03	995.0	3.3	17	11.1	
0500		6050.00	18.8	98.2	085	085	110	2°W	23°W													
0600		6066.60	18.9	98.4	085	085	110	3°W	22°W													
0700		6085.10	18.6	96.5	085	085	110	3°W	22°W													
0800	+2	6102.25	19.1	98.5	085	085	109	2°W	22°W	5	255	24	2	280	8	97	02	998.5	6.1	4.0	12.8	
0900		6120.28	19.2	98.8	085	085	108	2°W	21°W													
1000		6138.10	19.1	98.6	085	085	108	2°W	21°W													
1100		6155.60	19.2	99.1	085	085	107	2°W	20°W													
1200	+2	6173.15	19.2	99.3	085	085	107	2°W	20°W	7	225	18	3	320	7	97	02	1004.0	4.4	3.3	11.1	
1230 1255 1300		6191.60	19.1	98.9	085 055 045	085 055 045	107 077 067	2°W 2°W 2°W	20°W 20°W 20°W													
1400		6202.43	12.8	64.4	VAR	VAR	VAR	VAR	20°W													
1500		6219.21	18.6	96.8	085	085	107	2°W	20°W													
1600	+2	6237.52	19.2	99.3	085	085	107	2°W	20°W	5	120	15	3	320	7	98	01	1008.0	4.4	3.3	10.6	
1700		6256.52	19.2	99.3	085	085	107	2°W	20°W													
1800	+2	6272.36	18.6	99.3	085	085	107	2°W	20°W	5	265	15	3	300	6	97	02	1009.0	6.7	4.4	11.1	
1900		6291.00	18.6	99.5	085	085	107	2½°W	19½°W													
1915		6295.50	4.5		085	085	107	2½°W	19°W													
2000	+2	6308.3	14.4	99.3	095	095	117	2½°W	19°W	5	265	15	3	290	5	98	02	1012.0	6.7	5.6	10.6	
2100		6326.55	19.0	99.4	095	095	115	2°W	18°W													
2200		6346.66	19.1	99.8	095	095	115	2°W	18°W													
2300		6362.30	19.0	99.5	095	095	115	2°W	18°W													
2400	+2	6378.50	19.1	99.5	095	095	115	2°W	18°W	7	250	20	2	250	6	98	03	1012.3	5.0	6.1	11.7	

Distance run through the Water Midnight to Midnight
430.7

Leave Granted to Ship's Company

Anchor Bearings

1973

FROM HALIFAX

TO PORTSMOUTH U.K., OR AT

REMARKS

Initials of the Officer of the Watch

0130 (+2) a/c 085. Commenced Pubex and Codex.
0145 Pubex and Codex complete.

0600 { 50°13.7' N
DR { 29°07.0' W

0750 - SUNRISE, NAVIGATION LIGHTS SWITCHED OFF.

0805 { 50°15.5' N
LORAN { 28°28.0' W

1245 - REPLENISHMENT STATIONS A, 1 & 2 CLOSED UP
1250 - a/c 055
1255 - a/c 045

1301 - RAS SSD CLOSED UP 1313 - a/c 110
1302 - SP 12 1315 - a/c 060
1304 - a/c 080 1335 - MARGARET ALONGSIDE 1400 - RAS STATIONS SECURED

1401 - RAS SSD SECURED
1402 - a/c 085 SP 19
1449 - EXERCISED NBCD SECTION BASES
1532 - SECURED EMERGENCY STATIONS
1557 - SUNSET NAV LTS S/W ON

1505 { 50°18' N
OBS POS { 25°10' W

1635 - FIREMAIN PINHOLE LEAK STBD JUNGLE DECK, RISER TO UPPER DECK ISOLATED

1740 { 50°30' N
LORAN { 24°00' W

1915 a/c 095. ME took stn 195-2000

1938 { 50°30' N
LORAN { 22°54' W

2215 { 50°26.8' N
LORAN

2318 - COMMENCED BLOWING SOOT
2400 - CLOCKS ADVANCED 1HR TO TIME ZONE (+1)

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	50°15.5' N	28°28.0' W	0805 LORAN				STARTING
1200	50°17.2' N	26°20.0' W	DR ON 0805 LORAN				
2000	50°31' N	22°47' W	1938 (+2) LORAN				

HMCS PROTECTEUR

SATURDAY

13th OF JANUARY

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	+1																					
0200		6398.60	19.0	99.3	095	095	115	2°W	18°W													
0300		6414.50	19.1	99.5	095	095	115	2°W	18°W													
0400	+1	6432.80	19.0	99.0	095	095	115	2°W	18°W	7	250	15	3	270	5	97	25	1015.0	4.4	5.6	13.3	
0500		6450.46	19.1	99.2	095	095	114	2°W	17°W													
0600		6468.50	19.1	99.2	095	095	114	2°W	17°W													
0700		6485.60	19.1	99.1	095	095	114	3°W	16°W													
0800	+1	6503.43	19.1	99.3	095	095	114	3°W	16°W	4	275	10	2	260	4	98	01	1015.5	7.8	6.7	12.8	
0900		6521.09	19.1	99.4	095	095	114	3°W	16°W													
0920					095	095	114	3°W	16°W													
0926					065	065	084	3°W	16°W													
1000		6535.28	15.5	76.7	095	095	114	3°W	16°W													
1026					095	095	114	3°W	16°W													
1032					200	200	219	3°W	16°W													
1100		6546.56	12.5	62.7	095	095	114	3°W	16°W													
1200	+1	6556.50	11.5	55.5	VAR	VAR	VAR	VAR	16°W	5	275	10	2	265	5	98	03	1015.0	10.0	8.9	11.7	
1300		6565.68	10.9	54.2	VAR	VAR	VAR	VAR	15W													
1400		6579.60	10.8	85.7	VAR	VAR	VAR	VAR	15W													
1500		6592.48	13.3	66.6	VAR	VAR	VAR	VAR	15W													
1600	+1	6608.91	18.2	95.1	095	095	112	2°W	15°W	2	240	18	3	260	5	98	02	1013.0	9.4	8.3	13.6	
1700		6627.15	19.7	103.5	095	095	110	1°W	14°W													
1800	+1	6646.63	20.5	102.5	095	095	110	1°W	14°W	2	220	14	1	240	5	98	02	1013.0	11.0	10.0	13.2	
1900		6663.58	18.3	91.5	095	095	110	1°W	14°W													
2000	+1	6674.84	12.4	63.4	095	095	110	1°W	14°W	3	220	14	2	240	5	98	02	1013.0	11.1	10.0	12.2	
2100		6691.61	16.9	85.1	095	095	109	1°W	13°W													
2200		6709.07	17.1	87.4	095	095	109	1°W	13°W													
2300		6723.55	17.2	87.9	095	095	109	1°W	13°W													
2400	+1	6746.35	17.5	89.2	095	095	109	1°W	13°W	3	210	16	2	240	4	98	02	1009.0	9.4	8.9	12.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	390.9			

1972 FROM HALIFAX

TO PORTSMOUTH U.K., OR AT

REMARKS		Initials of the Officer of the Watch
0100 - COMMENCED FLASHEX		
0130 - FINISHED BLOWING SOOT.		
0200 - COMPLETED FLASHEX		
0218 } 50° 21' N LORAN { 20° 17' W		JPB
0337 } 50° 22' N LORAN { 19° 43' W		
0430 - Commenced Reluel Ex.		
0430 - Commenced Navcomex 202		
0430 - Commenced Navcomex 209		
0530 - Completed Reluel Ex.		
0600 } 50° 17' 5" N DR { 18° 36' 0" W		
0603 - Completed Navcomex 209		
0610 - Completed Navcomex 202		
0806 - SUNRISE NAV LFS SW OFF		
0845 - HANDS TO FLYING STATIONS		
0900 - REPLENISHMENT STATIONS A, B, 1, 2, 3, 4 CLOSED UP		
0900 - CLEAR LOWER DECKS TO ASSIST IN RAS		
0915 - RAS SSD CLOSED UP		
0920 - a/c 065 SPI4		
0923 - SP 12		
0926 - a/c 095		
0935 - MARGAREE ALONGSIDE STBD.		
1023 - MARGAREE SLIPPED		
1026 - a/c 200		
1030 - LAUNCHED HELO 39		
1032 - a/c 095		
1039 - MARGAREE ALONGSIDE PORT		
1100 - MARGAREE EXPERIENCED STEERING GEAR DIFFICULTY - EMERG. BREAKAWAY		
1104 - CO + SP VARIOUS TO AVOID CLOSE QUARTERS.		
1123 - HANDS TO FLYING STATIONS		
1140 - a/c 095		
1105 - a/c 095 SP 10		
1130 - SP 12		
1108 - RAS STATIONS AND SSD SECURED		
1140 - RECOVERED HELO 03		
1120 50° 43' 0" N 15° 30' 0" W LORAN		RAB
1233 a/c 245. 1239 Recovered Helo 39		
1300 a/c 200		
1306 launched Helo 39 a/c 095. 1308 ME rejoined. Sp. 19. 1341 Execised.		
Steering Gear breakdown 1355. Exercise complete		
1442 Execised man Overboard. Hands to Rescue Stations 1447. launched		
Sea Rover. 1455 Recovered Sea Rover. 1500. CO 095. Sp. 19.		
1625 - SUNSET, NAVIGATION LIGHTS SWITCHED ON		
1830 - REPLENISHMENT STATIONS A+B CLOSED UP		
1845 - RAS SSD CLOSED UP		
1845 - SP 12		
1901 - MARGAREE ALONGSIDE STBD		
1903 - FIRST LINE PASSED		
2003 - Last line Margaree took stern 1 mile on starboard beam.		
2005 - Sp 17 left		
2030 - Commenced Screensup		
2105 - Completed Screensup.		
2255 } 49° 50' N LORAN { 12° 09' W		JPB
2045 } 50° 00' N LORAN { 13° 00' W		
2400 - CLOCKS ADVANCED 1 HOUR TO ZONE ZULU (A)		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	50° 13.5' N	17° 28.0' W	DR ON 0337 LORAN				STEAMING
1200	50° 08.0' N	16° 15.0' W	D.R. from 1120 LORAN.				
2000	49° 54.2' N	12° 52.0' W	DR FROM 1845 LORAN				

HMCS PROTECTEUR

SUN DAY

14TH OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200		675685	17.1	87.6	095	095	108	1W	12W													
0300		6772.85	17.6	87.5	095	095	108	1W	12W													
0400		6789.4	17.1	87.4	095	095	108	1W	12W	6	215	25	4	210	6	98	02	1008.0	10.4	7.2	13.3	
0500		6805.78	17.1	87.5	095	095	107	0	12W													
0600		6822.58	17.1	87.5	095	095	106	1°E	12W													
0700		6838.32	17.3	88.0	095	095	105	1°E	11W													
0800		6854.69	17.2	87.8	095	095	105	1°E	11W	2	205	30	2	210	6	98	02	1009.0	10.0	7.2	11.7	
0900		6871.44	17.2	87.8	095	095	105	1°W	9°W													
0930					095	095	105	1°W														
1000		6889.35	17.3	88.1	090	090	100	1°W	9°W													
1100		6903.88	17.3	88.1	090	090	100	1°W	9°W													
1200		6920.58	17.3	88.3	090	090	100	1°W	9°W	8	200	35	3	180	5	97	25	1000	10.0	5.6	11.1	
1300		6937.40	17.7	88.5	090	090	100	1°W	9°W													
1400		6952.76	17.3	88.2	090	090	100	1°W	9°W													
1419					090	090	100	1°W	9°W													
1500		6967.00	17.0	79.4	080	080	090	1°W	9°W													
1600		6980.60	15.1	75.5	080	080	090	1°W	9°W	8	200	40	4	180	8	97	02	995	10.0	8.9	12.2	
1700		6993.88	15.1	75.4	080	080	090	1°W	9°W													
1800		7007.82	15.1	75.4	080	080	090	1°W	9°W	8	220	45	5	170	8	96	80	994.0	10.0	8.9	12.2	
1900		7020.70	15.1	75.4	080	080	090	1°W	9°W													
2000		7033.40	15.1	75.4	080	080	090	1°W	9°W	8	190	45	5	170	8	96	21	994.0	8.9	8.9	11.1	
2100		7045.37	14.7	74.4	080	080	090	2°W	8°W													
2200		7058.00	15.5	78.6	080	080	090	2°W	8°W													
2300		7071.81	16.1	81.5	080	080	090	2°W	8°W													
2400		7085.46	15.2	76.8	080	080	090	2°W	8°W	8	180	45	8	170	8	96	80	990	9.4	8.9	11.1	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	378.1			

1973 FROM HALIFAX

TO PORTSMOUTH U.K.; OR AT

REMARKS		Initials of the Officer of the Watch
0147(8) Commenced Codex and Pubex. 0124 Pubex completed 0155 Codex completed.		
0234 49° 46.0' N 11° 03.4' W LORAN		
0756 SUNRISE - NAV. LYS SWITCHED OFF		
0800 { 49° 42.0' N DR { 8° 36.2' W		
0805 { 49° 42.0' N LORAN { 8° 33.0' W		
0930 - a/c 090		
0915 { 49° 37.5' N LORAN { 8° 13.0' W		
1240 DECCA { 49° 39.8' N 6° 44.0' W		
1320 DECCA { 49° 39.5' N 6° 30.0' W		
1419 a/c 080 SP15		
1536 DECCA { 49° 43.5' N 5° 35.8' W		
1615 - Mangrove Stud 1 mile astern 1645 - Sunset Nav Lys switched on		
1656 DECCA { 49° 46.0' N 5° 12.4' W		
1738 DECCA { 49° 47.9' N 4° 59.0' W		
1828 DECCA { 49° 50.5' N 4° 41.5' W		
1947 DECCA { 49° 55' N 4° 16.5' W		
2001 - Paper deck placed out of bounds		
2100 - ATSP 10 KTS		
2103 - ATSP 15 KTS		
2123 - ATSP 16 KTS		
2200 DECCA { 50° 00' N 03° 36' W		
2245 DECCA { 50° 03' N 03° 20' W		
2320 - ATSP 15 KTS		
2332 DECCA { 50° 05' N 03° 03' W		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	49° 42.0' N	08° 36.2' W	0800 DR				STEAMING
1200	49° 39.0' N	06° 52.3' W	DR FROM 0915 LORAN				
2000	49° 55.4' N	04° 10.8' W	DR FROM 1947 DECCA				

HMCS PROTECTEUR

MON DAY

15TH OF JANUARY

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		7094.80	14.9	74.8	080	080	090	2°W	8°W													
0122					080	080	090	2°W	8°W													
0200		7110.04	14.6	73.0	075	075	085	2°W	8°W													
0206					075	075	085	2°W	8°W													
0212					075	075	085	2°W	8°W													
0300		7122.45	14.3	71.7	075	075	085	2°W	8°W													
0400	⊕	7137.10	14.4	72.0	075	075	085	2°W	8°W	8	190	25	2	170	6	97	60	990	9.4	8.9	11.1	
0500		7147.97	12.1	60.6	075	075	085	2½°W	7½°W													
0547					075	075	085	2½°W	7½°W													
0600		7157.00	11.3	56.8	350	350	001	3½°W	7½°W													
0700		7168.47	13.1	65.4	VAR	VAR	VAR	VAR	7½°W													
0800	⊕	7177.07	10.4	52.3	VAR	VAR	VAR	VAR	7°W	8	190	30	2	170	3	97	41	991.0	8.3	7.8	9.4	
0840					VAR	VAR	VAR	VAR	7°W													
0900		1181.26	4.2	23.0	VAR	VAR	VAR	VAR	7°W													
1000																						
1100																						
1200	⊕									8	250	10				97	41	991.0	6.7	6.7		
1300																						
1400																						
1500																						
1600										8	170	10				97	60	993.0	6.7	6.7		
1700																						
1800																						
1900																						
2000										8	170	10				97	60	995.0	5.6	5.0		
2100																						
2200																						
2300																						
2400										8	170	5				97	01	995.0	5.1	5.0		

Distance run through the Water Midnight to Midnight

109.3

Leave Granted to Ship's Company

PERSONNEL NREQ FROM 1600 MONDAY
15 JAN UNTIL 0755 TUESDAY 16 JAN 73.

Anchor Bearings

1973 FROM HALIFAX, N.S. TO PORTSMOUTH, ENGLAND, OR AT PORTSMOUTH

REMARKS		Initials of the Officer of the Watch
	0056 DECCA { 50° 08' N 02° 34.1' W	
0122 - Sp 14, AC 075	0119 DECCA { 50° 10' N 02° 26' W	
0206 Q/C 055 TO AVOID SHIPPING 0212 A/C 075 TO REGAIN TRACK	0223 DECCA { 50° 14' N 02° 04.5' W	
	0325 DECCA { 50° 18.4' N 01° 39.5' W	DRE
0453 Sp. 14.	0418 Decca { 50° 31.1' N 01° 17.5' W	
0544 a/c 354 Sp. 13.	0515 Decca { 50° 22.8' N 01° 59.2' W	
0612 a/c 344. 0634 a/c 345 0635 a/c 354 0641 a/c 345. 0645 ME detached to join STAVANGER.		
0655 - SSD cable party closed up Co 9 as req to enter Portsmouth Harbour assumed Condition 1		
0720 - Hauls to Stns for entering harbour. Co 9 as required to enter Hbr.		
0735 - Pilot onboard.		
0800 - Sunrise - NAV LTS SWITCHED OFF		
0840 - Secured Alongside Pitch Home Jetty Starboard side to. 0900 - COLOURS		
0902 - Secured SSD. Cable party.		
0905 - Runny off Main Engines Reverted to 12 hours notice 0900 - COLOURS 50%		
0915 - USS 1111 Secured alongside Port Side 0910 - Pilot ashore.		
1000 - HANDS EMPLOYED AT CLEANING STATIONS		
1230 - CSNF, COMMANDER J.D.E. FIELDHOUSE, RN AND COMMANDING OFFICERS SNF SHIPS ONBOARD		
1315 - COMMANDER FIELDHOUSE ASHORE		
1600 - SECURE		
1627 - SUNSET		
1750 - SHORE PATROL (1 MAN) LANDED TO GUARDSHIP, HMS FALMOUTH		
1947 - ROUNDS CORRECT		
1958 - EMERGENCY PARTY EXERCISED. FIRE IN GAS TURBINE COMP.		
2030 - SHORE PATROL RETURNED ONBOARD		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					12 HRS.
1200	° ' "	° ' "		0800	30' 2"	31' 10"	
2000	° ' "	° ' "					

HMCS PROTECTEUR

TUESDAY

16th OF JANUARY

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	CALM					98	02	999.0	4.4	3.9	
0500																					
0600																					
0700																					
0800										1	250	10				98	02	999.0	5.6	5.0	
0900																					
1000																					
1100																					
1200	8 W									1	CALM					98	02	1000	16.7	16.7	
1300																					
1400																					
1500																					
1600										7	CALM					98	03	999	8.3	8.3	
1700																					
1800																					
1900																					
2000										7	CALM					97	03	999	6	6	
2100																					
2200																					
2300																					
2400										8	CALM					98	02	1000	6.7	6.7	

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

HMCS *PROTECTEUR*

WEDNESDAY

17 OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	180	10				98	02	1000	5.6	5.6	
0500																					
0600																					
0700																					
0800										8	180	10				98	02	1001	6	6	
0900																					
1000																					
1100																					
1200	Ø									4	045	15				98	01	1003	11.1	11.1	
1300																					
1400																					
1500																					
1600										8	000	10				98	03	1004	7.8	8.9	
1700																					
1800																					
1900																					
2000										8	000	10				98	02	1008	5.6	5.6	
2100																					
2200																					
2300																					
2400										8	000	5				97	02	1009	5.0	5.0	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	<i>PNRFD from 1600 Wednesday until 0755 Thursday.</i>	

73
 1973 FROM

TO

OR AT PORTSMOUTH

REMARKS

Initials
 of the
 Officer
 of the
 Watch

0759 - SUNRISE
 0800 - HAND EMPLOYED AT CLEANING STATIONS

0900 - COLOURS - HANDS EMPLOYED BY DEPARTMENTS

[Signature]

1315 - HANDS EMPLOYED BY DEPARTMENTS

1600 - SECURE
 1629 - SUNSET

1945 - ROUNDS CORRECT
 1950 - EXERCISED FIRE IN THE HANGER

[Signature]

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

HMCS *PROTECTEUR*

THURS DAY

18th OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										8	000	10				98	02	1011	4.4	4.4		
0500																						
0600																						
0700																						
0800										8	350	5				98	02	1012	4.4	4.4		
0900																						
1000																						
1100																						
1200	A									4	350	5	-	-	-	98	01	1009.0	6.7	5.6		
1300																						
1400																						
1500																						
1600										4	CALM		-	-	-	98	02	1011.0	6.7	5.0		
1700																						
1800																						
1900																						
2000										4	CALM					98	02	1012.0	4.4	3.9		
2100																						
2200																						
2300																						
2400										4	350	5				98	02	1009.0	4.4	3.9		

Distance run
through the Water
Midnight to
Midnight

Leave Granted to Ship's Company

Anchor Bearings

PERSONNEL NREFD FROM 1600 THURSDAY
UNTIL 0755 FRIDAY.

HMCS PROTECTEUR

FRI DAY

19TH OF JANUARY

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	350	5	-	-	-	98	02	1008.0	3.9	2.8		
0500																						
0600																						
0700																						
0800										8	CALM	-	-	-	-	98	03	1009	6.7	5.0		
0900																						
1000																						
1100																						
1200	Ø Z ₁₂₀									8	350	10	-	-	-	98	02	1008	6.1	6.1		
1300																						
1400																						
1500																						
1600										8	150	5	-	-	-	98	02	1010	6.7	5.0		
1700																						
1800																						
1900																						
2000										8	150	5	-	-	-	98	02	1004	6.1	5.0		
2100																						
2200																						
2300																						
2400										8	180	10	-	-	-	97	03	1001	3.9	3.9		

Distance run through the Water Midnight to Midnight

Leave Granted to Ship's Company
PERSONNEL NRPD FROM 1300 FRIDAY
TO 0755 SATURDAY

Anchor Bearings

HMCS. PROTECTEUR

SATURDAY

20th OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	180	10	-	-	-	97	80	996	3.3	3.3	
0500																					
0600																					
0700																					
0800										8	180	15	-	-	-	97	02	993	5.6	5.6	
0900																					
1000																					
1100																					
1200										8	180	20				97	02	989.0	7.8	7.2	
1300																					
1400																					
1500																					
1600										4	270	20				97	01	982.0	6.7	6.2	
1700																					
1800																					
1900																					
2000										7	270	15				98	02	984.0	6.7	6.1	
2100																					
2200																					
2300																					
2400										6	CALM					98	02	995.0	5.6	5.6	

Distance run
through the Water
Midnight to
Midnight

Leave Granted to Ship's Company

Anchor Bearings

PERSONNEL N RFD FROM 1200 SATURDAY
UNTIL 0755 MONDAY

1973

FROM

TO

, OR AT PORTSMOUTH,
ENGLAND

REMARKS		Initials of the Officer of the Watch
s.19(1)		
0755 - SUNRISE		
0800 - HANDS EMPLOYED AT CLEANING STATIONS		
0855 - AMMUNITION LIGHTER ALONGSIDE, AMMUNITIONING SHIP		JAW
0900 - COLOURS HANDS EMPLOYED BY DEPARTMENTS		
0915 - [REDACTED] PTE BLACKWOOD OF MARGAREE REPORTED ON BOARD		
1000 - AMMUNITION LIGHTER SLIPPED		
1200 - SECURE		
1205 - M.S. SCHWARZWALD ALONGSIDE - WEST GERMAN AVALLUY		
1300 - SUPPLY DEPARTMENT EMPLOYED TRANSFERRING STORES FROM SCHWARZWALD TO PROTECTEUR.		
s.19(1)		
[REDACTED] CPL MACDONALD JW OF MARGAREE REPORTED ON BOARD		
1635 - SUNSET		
1930 - ROUNDS CORRECT		FBS
2300 - STORING SHIP COMPLETED		

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

HMCS PROTECTEUR

SUNDAY

21ST OF JANUARY

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										7	CALM					97	03	995.0	5.0	5.0	
0500																					
0600																					
0700																					
0800										8	CALM					98	02	999.0	5.0	5.0	
0900																					
1000																					
1100																					
1200	Z									7	CALM					98	02	1000	3.6	3.0	
1300																					
1400																					
1500																					
1600										6	270 4					98	02	1006	6.7	3.3	
1700																					
1800																					
1900																					
2000										5	CALM					98	02	1005	3.9	3.3	
2100																					
2200																					
2300																					
2400										5	CALM					98	02	1008	2.8	2.8	

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

HMCS PROTECTEUR

MONDAY

22nd OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										2	CA	LM				98	02	1011	33	2.8	
0500																					
0600																					
0700																					
0800										3	CA	LM				98	02	1015	33	2.2	
0900																					
1000																					
1100																					
1200	Z									0	250	8				98	02	1018.0	11.1	10.0	
1300																					
1400																					
1500																					
1600										4	240	6				98	03	1020.0	8.9	7.2	
1700																					
1800																					
1900																					
2000										7	CALM					98	02	1021.0	7.8	6.7	
2100																					
2200																					
2300																					
2400										8	230	5				97	51	1021.0	7.2	7.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PERSONNEL NRED FROM 1700 MONDAY UNTIL 0755 TUESDAY 123 JAN.			

HMCS PROTECTEUR

TUESDAY

23rd OF JANUARY

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	CALM					97	80	1020.0	8.3	8.3	
0500																					
0600																					
0700																					
0800										8	270	8				97	50	1019.0	9.4	8.8	
0900																					
1000																					
1100																					
1200	Ø	7196.65								8	270	5				97	49	1020.0	11.1	11.1	
1300																					
1400																					
1500		7182.15	3.4	17.8	VAR	VAR	VAR	VAR	8°W												
1600	Ø	7196.65	16.1	80.6	VAR	VAR	VAR	VAR	8°W	8	300	15	2	300	2	97	02	1027.0	12.8	15.2	12.0
1700		7215.48	17.9	90.2	230	230	239	1°W	8°W												
1800	Ø	7234.24	17.9	90.6	250	250	258	Ø	8°W	8	320	15	2	300	2	96	02	1027.0	12.8	12.8	11.1
1809					250	250	258														
1818					205	205	213	Ø													
1900		7252.06	17.5	89.5	250	250	258	Ø	8°W												
1932					250	250	258														
1941					215	215	223	Ø	8°W												
2000	Ø	7269.40	17.5	88.5	250	250	258	Ø	8°W	8	320	16	2	305	2	97	01	1029.0	12.8	12.8	11.1
2043					250	250	258	Ø	8°W												
2048					290	290	298	Ø	8°W												
2100		7284.15	14.9	74.8	250	250	258	Ø	8°W												
2200		7296.98	13.2	66.3	VAR	VAR	VAR	VAR	8°W												
2243					310	310	318	Ø	8°W												
2300		7307.88	11.8	59.1	230	230	238	Ø	8°W												
2400	Ø	7319.63	12.0	59.0	230	230	238	Ø	8°W	8	290	15	2	305	2	97	02	1032.0	11.7	11.7	11.1

Distance run through the Water Midnight to Midnight	/ Leave Granted to Ship's Company	Anchor Bearings	
		142.2	

1973 FROM

TO

, OR AT PORTSMOUTH ENGLAND

REMARKS

Initials of the Officer of the Watch

0753 - SUNRISE
0800 - HANDS EMPLOYED AT CLEANING STATIONS

DKE

0900 - CONOURS HANDS EMPLOYED AT PART SHIP

RFB

1400 - SSD Cable Pans closed up. Assumed Cond Y
1405 - Palot onboard 1415 - Tugs alongside
1429 - Chopped & proceeded - cut sp as req to clear harbour. 1435 - Tugs slipped
1450 - Hands to flying strgs. 1455 - sp 5 hrs
1500 - Pilot ashore. 1505 - sp as req to clear harbour entrance
1513 - Recovered Hells 03.
1519 - Stood down flying strgs.
1537 - Secured 550 Chief party. Alc 145 sp 15 hrs 1540 - Alc 170 1544 - Alc 180 1557 - Alc 230

DKE

1643 - Sunned Nav Lgts switched on
1700 - Alc 250

1698 { 50° 25.8' N
DECCA { 1° 18.8' W

1726 - Hands to flying strgs.
1750 - alc 300
1756 - Hells daimished for Medicine. Chief Keiseri onboard Alc 250

1757 { 50° 18.7' N
DECCA { 1° 52.2' W

1808 - Sp. B 1815 - ceased sounding fog signals
1809 - COMMENCED SOUNDING FOG SIGNALS, Alc 205 1818 - Sp. 19

1829 { 50° 14.0' N
DECCA { 02° 06.2' W

1932 - Alc 215 to avoid shipping 1958 - Sp. 19
1941 - Alc 250
1948 - Sp. 10

1943 { 50° 12.1' N
DECCA { 02° 22.8' W

2023 - Sp 10
2048 - Alc 290
2048 - Alc 250 Sp 18

2000 { 50° 06' N
DECCA { 2° 43' W

2108 - HANDS TO FLYING STATIONS 2149 - Alc 290
2124 - Sp 10 2156 - RECOVERED HELD 03
2145 - Alc 350 2156 - RAS STATION A & SSD CLOSED UP
2201 - STOOD DOWN FLYING STATIONS 2243 - RAS STATION A & SSD SECURED
2219 - MARGARET ALONGSIDE STBD 2243 - Alc 230 Sp 12
2242 - MARGARET SLIPPED

2221 { 52° 06' N
DECCA { 3° 20' W

2326 { 50° 01.5' N
DECCA { 3° 32.0' W

DKE

DKE

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	'	'					
1200	'	'					
2000	50° 06' N	2° 43' W	2000 DECCA	1400	30' 6"	31' 5"	1 HR

HMCS PROTECTEUR

NEWNES DAY

24th OF JANUARY

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		7331.00	12.0	59	230	230	240	2°W	8°W													
0200		7342.63	12.1	59.1	230	230	240	2°W	8°W													
0205					230	230	240	2°W														
0300		7354.44	12.0	59	140	140	150	2°W	8°W													
0320					140	140	150	2°W														
0400	⊙	7366.40	11.9	59.2	050	050	058	0°	8°W	8	335	14	2	350	2	97	02	1032.5	11.1	11.1	10.9	
0500		7378.9.0	12.5	66.9	050	050	058	0°	8°W													
0600		7394.11	15.2	76.7	050	050	058	0°	8°W													
0700		7405.30	11.2	60.1	VAR	VAR	VAR	VAR	8°W													
0736					180	180	191	3°W	8°W													
0755					000	000	005	3°E														
0800	⊙	7415.40	10.0	50.0	320	320	328	⊙	8°W	8	335	12	2	350	2	97	02	1032.0	10.7	10.7	10.9	
0900		7429.10	10.0	49.9	VAR	VAR	VAR	VAR	8°W													
0926					300	300	308	⊙														
1000		7435.41	11.6	58.5	000	000	005	3°E	8°W													
1100		7449.40	14.1	71.7	000	000	005	3°E	8°W													
1200	⊙	7461.87	13.8	69.7	VAR	VAR	VAR	VAR	8°W	3	260	10	1	240	2	97	01	1031.0	12.8	11.7	11.1	
1300		7474.23	14.6	73.7	000	000	005	3°E	8°W													
1308			1.6		000	000	005	3°E	8°W													
1400		7487.97	18.6	60.1	075	075	080	3°E	8°W													
1500		7500.14	12.2	60.0	VAR	VAR	VAR	VAR	8°W													
1600	⊙	7515.75	16.2	81.2	VAR	VAR	VAR	VAR	8°W	6	240	12	1	190	2	98	03	1031.0	12.8	11.7	11.1	
1700		7528.12	13.2	66.8	VAR	VAR	VAR	VAR	8°W													
1800	⊙	7529.14	1.0	7.2	VAR	VAR	VAR	VAR	8°W	7	240	12		CALM		97	02	1031	11.7	10.6	11.1	
1900																						
2000	⊙									7	240	12				98	02	1032	11.7	11.1	-	
2100																						
2200																						
2300																						
2400	⊙									8	190	6		CALM		95	03	1030.5	5.2	5.2		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	215.8	"C" Head 035° "A" Head 095° Torpedo. Per Lt. 347° BN. 291°

19 73

FROM PORTSMOUTH TO PORTLAND, OR AT PORTLAND

REMARKS		Initials of the Officer of the Watch
	0030 { 49° 53' 6" N DECCA { 3° 46' 8" W	
	0145 { 49° 49' 2" N DECCA { 4° 03' 8" W	
0205 - a/c 120	0230 { 49° 38' 5" N DECCA { 4° 05' 5" W	
0320 - a/c 050	0327 { 49° 31' 0" N DECCA { 3° 36' 5" W	
0530 - HANDS TO FLYING STATIONS	0500 { 49 48.0 N DECCA { 03 35.5 W	
0603 - a/c 300° 0607 - HELO 03 LAUNCHED 0609 - a/c 050° 0615 - a/c 180°	0642 { 49 48 N DECCA { 03 18 W	
0730 - HANDS TO FLYING STATIONS 0736 - a/c 006° 0755 - A/c 320 0757 - Sunrise Nav lgt's switched off	0730 { 49 40 N DECCA { 03 18 W	
0804 - Helo recovered 0810 - Helo launched 0811 - Mc 000	0831 { 49° 44.8' N DECCA { 03° 18.2' W	
0823 - A/c 180 0845 - RAS SSD closed up 0849 - A/c 300 0852 - Helo recovered	0908 { 49° 43.6' N DECCA { 03° 20.0' W	
0830 - Hands to Replenishment Stations Stations A, B, 1, 2, 3 closed up. 0920 - SEMHES alongside sthd 0930 - FALMOUTH alongside port	1010 { 49° 55.4' N DECCA { 03° 18.3' W	
093 - Helo launched 0904 - Stood down flying stations 0904 - Mc 000	1147 { 50° 11.9' N DECCA { 03° 20.0' W	
1018 - Demmes shipped 1040 - Falmouth shipped 1041 - Sp. 19	1212 { 50° 11.4' N DECCA { 3 16.5' W	
1121 - Mc 180 7.16 1125 - Sp. 10 1130 - Flying stations	1159 - 195 SP 18	
1132 - A/c 250 1142 - Helo recovered 1146 - Stood down flying stations	1240 - RAS STATIONS A, B, 1, 2 CLOSED UP 1246 - RAS SSD CLOSED UP	
1201 - a/c 800 SP 16 1216 - HANDS TO FLYING STATIONS 1221 - RECOVERED HELO 39 1230 - LAUNCHED HELO 39	1317 - MARGARET ALONGSIDE STBD 1318 - ISAAC SWARRS ALONGSIDE PORT 1347 - ISAAC SWARRS R/S SWARRS	
1302 - a/c 000 SP 12 1307 - LAUNCHED HELO 03 1308 - a/c 075	1415 - ISAAC SWARRS SHIPPED 1422 - MARGARET SHIPPED 1433 - STAVANGER ALONGSIDE PORT	
1378 - STAVANGER R/S SHIPPED 1379 - RAS STATIONS + SSD SECURED 1399 - SP 18 RB	1432 - MARGARET SHIPPED 1440 - a/c 080 1442 - a/c 085	
1518 - STAVANGER SHIPPED 1519 - RAS STATIONS + SSD SECURED 1519 - SP 18 1535 - HANDS TO FLYING STATIONS	1442 - a/c 085 1541 - a/c 140 1544 - a/c 185	
1600 - SSD Cable Party closed up 1612 - Mc 000 1617 - Stables Lt Ship Lt A/c 345 1618 - Sp 10 1619 - A/c 330 1625 - A/c 345 1636 - A/c 299 1643 - Sunrise Nav lgt's on 1644 - Co 13000 lgt's under Portland Hdr	1546 - RECOVERED HELO 03 1547 - a/c 090 1549 - a/c 035	
1702 - Helo sthd 1715 - Cable to line 8 fathoms with 4 1/2 shackles at w/c 1716 - Run off Mt. came to 1/2 hr notice 1717 - Secured SSD Cable Party	1528 - BILL OF PORTLAND	
1800 - SHIP CLOSED UP AT AWKWARD STATE 3	1800 ASSUMED AWKWARD STATE 3 - NBCD COND Y	
1905 - ASSUMED AWKWARD STATE 2 - SMALL BOATS SIGHTED 1910 - ASSUMED AWKWARD STATE 1 - NBCD COND 2 - HANDS TO EMERGENCY STATIONS 1946 - ASSUMED AWKWARD STATE 2 - SECURED EMERGENCY STATIONS 1958 - Emergency Stations Assumed Cond 2	1800 ASSUMED AWKWARD STATE 3 - NBCD COND Y	
2049 - commenced bottom search	1800 ASSUMED AWKWARD STATE 3 - NBCD COND Y	
2118 - completed bottom search 2122 - secured emergency stations, reverted to cond "K"	1800 ASSUMED AWKWARD STATE 3 - NBCD COND Y	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	49° 42.5' N	03° 17' W	0745 (40) LORAN				
1200	50° 09.3' N	03° 20.5' W	DR ON 1147 FIX	1600	30' 2"	31' 3"	STEAMING
2000							

HMCS

PROTECTEUR

THURSDAY

25th OF JANUARY

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																92	45				
0200																93	42				
0300																95	41				
0400	φ	—	—	—	—	—	—	—	7 1/2 W	8	CALM	—	—	—	96	28	1030.4	10.4	10.4	—	
0500																					
0600																					
0700																					
0800	φ	7531.60	3.1	15.2	VAR	VAR	VAR	VAR	8°W	8	CALM	—	—	—	92	45	1029	10.0	10.0		
0900		7543.14	12.5	59.1	VAR	VAR	VAR	VAR	8°W												
1000		7551.48	15.8	81.4	270	270	277	1°E	8°W												
1100		7572.85	15.1	77.0	VAR	VAR	VAR	VAR	8°W												
1200	φ	7584.90	12.2	63.6	VAR	VAR	VAR	VAR	8°W	8	180	10	1	260	2	97	40	1029	11.1	10.0	10.6
1300		7598.80	13.6	68.4	VAR	VAR	VAR	VAR	8°W												
1400		7611.11	13.6	68.5	090	090	098	0	8°W												
1405					090	090	098	0													
1445					260	260	267	1°E													
1500		7621.90	10.1	50.5	210	210	217	1°E	8°W												
1600	Z	7639.25	12.7	63.6	VAR	VAR	VAR	VAR	8°W	8	230	10	1/2	260	2	98	01	1025.4	11.1	10.0	10.0
1700		7652.30	14.2	71.3	VAR	VAR	VAR	VAR	8°W												
1800	φ	7662.90	10.6	51.3	045	045	052	1°E	8°W	8	205	15	1/2	280	2	98	02	1025.0	11.1	10.6	11.1
1801					045	045	052	1°E													
1900		7671.20	10.0	50.0	270	270	279	1°W	8°W												
1915					270	270	279	1°W													
1950					100	100	108	0													
2000	φ	7680.80	10.2	51.1	090	090	098	0	8°W	8	205	10	1	280	2	98	02	1025	11.1	10.6	10.0
2100		7691.66	11.9	59.2	VAR	VAR	VAR	VAR	8°W												
2129					105	105	113	0	8°W												
2200		7704.14	12.1	61.0	245	245	253	0	8°W												
2300		7716.12	15.0	75.0	VAR	VAR	VAR	VAR	8°W												
2400	φ	7730.35	15.3	76.2	VAR	VAR	VAR	VAR	8°W	8	245	10	1	280	2	97	02	1025	11.1	10.6	11.1

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	208.0			

1973 FROM PORTLAND TO WUPS AREA, OR AT

REMARKS		Initials of the Officer of the Watch
0001 RDR	Sailing Club Pier 0.81 ± BRGS. "B" Head 0.59 Fore Head 1.07 Correct.	
0101 RDR	Sailing Club Pier 0.81 ± BRGS. "B" Head 0.57 Fore Head 1.06 Correct	
0201 RDR	Sailing Club Pier 0.83 ± BRGS. "B" Head 0.56 Fore Head 1.06 Correct	
0315 RDR	Sailing Club Pier 0.86 ± BRGS. "B" Head 0.56 Fore Head 1.09 Correct	<i>[Signature]</i>
0410 RDR	Sailing Club Pier 0.86 Fore Head 1.1 C. Head 0.63 ± BRGS. Correct	
0545. SSD Cable Party Closed Up. Assumed Cond Y		
0645. SSD Cable Party stood down		
0645. SSD Cable Party Closed Up.		
0700. Commenced Shortening Sm Lungon ME.		
0714. Waged & proceeded Col Spas req to clear Portland Hbr. Nav lgt on.		
0756. Sunrise		
0821 - S/c 165 sp 10 0827 - sp 12 0830 - Alc 180 sp 15 kts.		
0835. Shambles h/ship & st 1800		
0852. Alc 270 sp 18 kts.		
0930 - Sp 15		
1007 - Commenced zig zag		
1051 DECCA { 50°28.0'N 2°58.0'W		
1110 - Alc 090 Sp 12		
1133 - Recommended zig zag plan		
1206 - Ceased zig zag plan 20 1210 - stood down flying stations, Alc 090 1233 - Margaree slipped 1253 { 50°24.2'N 1208 - Alc 210 1211 - Sp 14 1245 - Stavanger slipped DECCA { 02°30.9'W 1209 - H/c launched 1220 - Margaree alongside stbd 1225 - Stavanger alongside port Lemmes alongside stbd		
1313 - Man overboard - false alarm 1345 - flying stations 1347 - Lemmes slipped 1350 - secured RAS SSD & Replenishment Stations 1357 - Alc 210 134 - Emergency breakaway, Lemmes port quarter collided with Protecteur's starboard quarter, CO ordered port 30 initially before collision, QM got to port 30 then stbd 30 alongside was ordered, PT course varied from 090 112° 1315 - after section was closed up - mil damage reported.		
1402 - H/c recovered 1445 - Alc 210 1328 - secured after section was closed up		
1405 - Alc 260 stood down flying stations 1429 { 50°21.0'N 1407 - Sp 18 DECCA { 02°15.2'W		
1505 - Alc 270 1515 - closed up 3150, Stavanger commenced fire 1541 - Alc 160 1516 { 50°17.2'N 1506 - Sp 10 1534 - Alc 170, Stavanger ceased firing 154 - Alc 150 DECCA { 02°28.2'W 1509 - Alc 000 1535 - Sp 15, closing target to commence fire 1537 - Alc 140		
1604 - Alc 090 1609 - Sp 15 1614 - Sp 10 1634 - Sp 14 163 - SUNSER - NAV LITS ON 1605 - Sp 8 1613 - Alc 080 1625 - Alc 350 Sp 18 1638 - GUNNARY 1637 - Alc 045 Sp 10 1607 - Sp 12 1614 - COMMENCED GUNNARY EXERCISE 1631 - Alc 150 1638 - Alc 330 Sp 18		
1704 - Alc 270 1714 { 50°19.6'N DECCA { 2°20.0'W		
1930 - Hands to Replenishment Station 1915 - Alc 100 1945 - Replenishment SSD closed up 1955 - Alc 090 Sp 12		
2000 - ISSAC SWEERS ALONGSIDE STBD		
2030 - Alc 090 2036 - Alc 100 2037 - Alc 105 2016 { 50°24.4'N 2035 - ISSAC SWEERS SLIPPED DECCA { 02°23.4'W 2036 - ISSAC SWEERS TOOK STATION 1950 PROTECTEUR 2000X		
2129 - Alc 245 2147 - Sp 12 2129 { 50 22.6'N 2130 - COMMENCED NIGHT ENCOUNTER DECCA { 02 05.1'W 2135 - NAVIGATION LIGHTS OFF 2137 - Sp 15		
2215 - Alc 180 Sp 20 2247 - Alc 220 2205 { 50 29.6'N 2225 - Alc 220 2250 - Alc 250 DECCA { 02 15.0'W 2232 - Alc 240 Sp 15 2300 - Alc 252		
2301 - Sp 12 2320 - NAVIGATION LIGHTS OFF 2350 Nav lgt on. 2303 - NAVIGATION LIGHTS ON 2330 - Sp 17 2400 - Ceased Night Encounters Exercise 2306 - Alc 250 Sp 15 2338 - Alc 180 2318 - Sp 14 2347 - Alc 250 Sp 12		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800							
1200	50°30.2'N	02°41.1'W	DR ON 1051 DECCA FIX	0700	30' 1"	31' 3"	
2000	50°25.0'N	02°26.8'W	DR				STEAMING

HMCS PROTECTEUR

FRIDAY

26th OF JANUARY

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	
0003 0050 0100		7738.80	9.7	48.6	VAR	VAR	VAR	VAR	8°W													
0200		7751.26	10.6	53.7	VAR	VAR	VAR	VAR	8°W													
0300		7762.55	12.0	56.1	VAR	VAR	VAR	VAR	8°W													
0400	⊖	7774.22	11.9	59.7	VAR	VAR	VAR	VAR	8°W	6	260	10	1/2	270	2	98	02	1024.0	10.6	10.6	10.6	
0500		7785.85	11.9	59.7	VAR	VAR	VAR	VAR	8°W													
0600		7795.55	12.0	60.1	VAR	VAR	VAR	VAR	8°W													
0700		7806.15	11.1	55.9	VAR	VAR	VAR	VAR	8°W													
0800	⊖	7814.0	10.6	53.0	VAR	VAR	VAR	VAR	8°W	4	230	5	∅	240	1	98	02	1024.0	10.6	10.1	10.2	
0900		7819.80	5.8	32.4	VAR	VAR	VAR	VAR	8°W													
1000		7836.15	17.2	89.2	VAR	VAR	VAR	VAR	8°W													
1100		785150	17.3	82.6	VAR	VAR	VAR	VAR	8°W													
1200	⊖	786335	11.8	60.3	VAR	VAR	VAR	VAR	8°W	3	270	20	2	270	4	98	02	1023	10.3	9.6	10.0	
1300		786542	2.07	27.2	VAR	VAR	VAR	VAR	8°W													
1310 1357 1400		787444	10.2	52.3	270 020 000	270 020 000	277 026 006	1°E 2°E 2°E	8°W													
1500		7883.30	9.4	49.6	VAR	VAR	VAR	VAR	8°W													
1600	⊖	7893.32	10.9	54.5	VAR	VAR	VAR	VAR	8°W	8	250	25	2	270	3	97	03	1020.0	10.6	9.4	11.1	
1700		7899.51	6.2	35.4	VAR	VAR	VAR	VAR	8°W													
1800	⊖									8	270	25	3	260	4	97	21	1017.0	10.6	9.4	10.0	
1900	⊖																					
2000	⊖									8	250	16	3	-	-	98	01	1016.0	13.9	12.2		
2100																						
2200		7899.55																				
2300		790518	8.2	40.9	VAR	VAR	VAR	VAR	7°W													
2320					180	180	186	1°W														
2400	⊖	7920.90	17.5	89.4	230	230	237	∅	7°W	8	295	16	7	265	5	97	02	1015	10.6	10.6	11.1	

Distance run through the Water Midnight to Midnight	225.0	Leave Granted to Ship's Company	Anchor Bearings

PORTLAND WATERS AREA

1973

FROM

TO

OR AT

SEA

REMARKS

Initials of the Officer of the Watch

0003 - A/C 240 0004 - Sp. 9 - Shut down steel hoist for repairs 0033 - Sp. 10	0050 - A/C 015 Sp. 14	0039 { 50° 03.9' N DECCA { 02° 04.7' W	
0120 - A/C 065 0130 - A/C 075 0133 - A/C 090 Sp. 12, screen executed, PT guide	0147 - Executed zig zag Plan II, Base Co. 090 Sp. 12, A/C 132 0149 - A/C 081	0140 { 50° 04.5' N DECCA { 02° 30.3' W	
0210 - A/C 068 0225 - A/C 106 0243 - A/C 059		0230 { 50° 05.6' N DECCA { 02° 19.5' W	
0306 - A/C 110 0324 - A/C 096	0336 - A/C 084	0338 { 50° 05.9' N DECCA { 02° 06.0' W	DAS
		0405 { 50° 07.2' N DECCA { 01° 46.2' W	
		0500 DECCA { 50° 14.1' N 1° 54.5' W ANVIL Pt 350°	
0603 - STBA BOILER BACK ON LINE 0635 - CEASED ZIG ZAG PLAN II 0657 - CO + SP VARIOUS TO LEAVE SHIPPING 0700 - SSD CABLE PARTY & BLIND PILOTAGE CLOSED UP	0714 - SP 12 0716 - CO + SP VARIOUS TO ENTER PORTLAND HBR 0742 - PASSED THROUGH BREAK WATER 0744 - COMMENCED FOG SIGNALS FOR EXERCISE	0750 - SUNRISE - NAV LITE ON FOR BLIND EXIT 0800 - CLEANING STATIONS	
0802 - ONE MAN FROM USS SEMMES ONBOARD WITH SWAN IN EYES 0815 - CO + SPs Reg to leave Portland Hbr 0830 - Hands to flying strgs 0842 - Passed through Breakwater	0844 - Ceased Fog Signals Nav lights off 0845 - S/C 0700 sp 10 kts 0847 - A/C 125	0850 SP 18 kts	
0903 - A/C 222 0905 - A/C 220 0907 - A/C 218 0910 - A/C 215	0911 - A/C 218 0918 - A/C 212 0919 - Secured SSD Cable Party 0922 - A/C 270	0924 - Launched Helo 0925 - A/C 210 0933 - A/C 220 0935 - Sec'd Screen PT Guide	
1002 - A/C 180 - COMMENCE ZIG ZAG PLAN II 1007 - A/C 1540 1032 - A/C 2220 1049 - A/C 1500 CEASED ZIG ZAG PLAN II		1050 { 50° 12.1' N DECCA { 02° 41.0' W	
1112 - A/C 080 - RESUMED ZIG ZAG PLAN II 1114 - A/C 1580 1120 - A/C 1800 SP 18 1130 - SSD CLOSED UP	1130 HANDS TO FLYING STATIONS 1132 - A/C 290 SP 10 1139 - HELD 03 ON DECK 1144 - A/C 295	1145 - STOOD DOWN FLYING STATIONS 1147 { 50° 04.1' N DECCA { 02° 34.4' W	JAMES
1201 - CO + SPs Reg to make approach on USS Semmes for Towing evolution 1249 - Stopped MPE. 1250 - Towing evolution completed Secured SSD. S/C 270 Sp 15 kts			
1310 - A/C 020 Sp 10 1357 - A/C 000		1354 { 50° 14.0' N DECCA { 2° 30.6' W	
1409 - A/C 356 1438 - A/C 352 1450 - A/C 350		1458 { 50° 23.7' N DECCA { 2° 29.0' W	
1503 - A/C 040 Sp 12 1520 - A/C 060 1523 - Sp 10 1547 - A/C 000	1552 - A/C 355 1556 - A/C 345 1557 - Sp 14 kts 1600 - SSD Cable Party closed up		
1602 - A/C 340 1608 - A/C 338 1610 - CO + SPs Reg to enter harbour	1634 - Let go Port & in 9 fathoms 1642 - Comm to with 6 shackles on deck 1652 - Secured Anchor lights switched on	1648 - Secured SSD Cable party 1/2 hrs Notice	
		1730 A HEAD 198 1/2 ± BRGS CORRECT C HEAD 268 1/2 ± CORRECT	
		1825 { C. Head 269° ± BRGS. Correct { A. Head 198°	
		1938 { C. Head 270° ± BRGS. Correct { A. Head 249°	
		2047 ± BRGS CORRECT { C. HEAD - 269 1/2 A. HEAD - 200	
2130 - SSD, CABLE PARTY AND BLIND PILOTAGE TEAM CLOSED UP 2145 - RUNC ON MPE. - COMMENCED SHORTENING			
2202 - WEIGHTED ANCHOR & PROCEEDED CO + SP VARIOUS TO LEAVE ANCHORAGE 2224 - A/C 131 Sp 12 2245 - A/C 166 Sp 16 2320 - A/C 230	2259 - SSD, CABLE PARTY AND BLIND PILOTAGE TEAM SECURED 2259 - A/C 180 SP 18	2324 - SHAMBLEE AT VESSEL ± STBA	
		2330 { 50° 23.8' N DECCA { 2° 21.6' W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	'	'					
1200	50° 05.1' N	02° 37.0' W	1147 (10) DECCA FIX	1600	30' 0"	31' 2"	STEAMING
2000	'	'		2200	30' 0"	31' 2"	

HMCS PROTECTEUR

SATUR. DAY

27 OF JAN.

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		7936.73	17.7	89.7	230	230	238	0	8°W													
0200		7953.01	17.7	89.8	230	230	238	0	8°W													
0300		7968.37	17.7	89.8	230	230	238	0	8°W													
0300 0345 0400		7983.80	2.4 18.8 4.5	89.8	230 240 230	230 240 230	238 247 238	0 1°E 0	8°W	8	320	24	5	265	6	97	02	1015.0	106	10.6	12.2	
0500		7998.98	17.9	91.2	230	230	239	3/4W	8 1/4W													
0600		8014.40	17.8	90.0	230	230	240	1/2W	8 1/2W													
0700		8029.70	17.8	90.2	230	230	240	1 1/4W	8 3/4W													
0800		8041.02	13.8	69.3	230	230	240	1 1/4W	8 3/4W	8	310	40	15	290	10	97	02	1017.0	11.1	11.1	11.1	
0900		8051.75	14.2	71.3	VAR	VAR	VAR	VAR	8 3/4W													
1000		8058.50	10.7	53.8	290	290	300	1/4W	8 3/4W													
1100		8066.75	11.7	58.4	VAR	VAR	VAR	VAR	8 3/4W													
1150 1200		8076.58	12.3	61.5	205 290	205 290	215 300	1/4W 1/4W	8 3/4W 8 3/4W	8	305	30	10	290	10	97	02	1020.0	11.1	11.1	11.1	
1300		8091.50	16.2	83.9	VAR	VAR	VAR	VAR	9°W													
1400		8104.85	15.8	80.5	205	205	213	1°E	9°W													
1500		8116.89	14.7	74.1	VAR	VAR	VAR	VAR	9°W													
1600		8130.22	16.0	80.4	VAR	VAR	VAR	VAR	9°W	7	310	30	5	300	10	97	01	1021.2	11.1	11.1	11.7	
1700		8144.50	16.0	80.1	205	205	214	1/2E	9 1/2W													
1800		8159.30	16.1	81.1	205	205	215	1/2W	9 1/2W	8	305	30	8	300	10	97	02	1022.5	11.1	11.1	11.7	
1900		8172.95	16.0	80.0	205	205	215	1°W	9°W													
2000		8188.29	16.1	80.3	205	205	215	1°W	9°W	8	305	24	7	300	9	97	02	1025.0	11.1	11.1	12.8	
2016 2100		8202.94	16.1	80.2	205 208	205 208	215 218	1°W 1°W	9°W 9°W													
2200		8216.21	16.0	80	208	208	218	1°W	9°W													
2300		8231.58	16.1	80.4	208	208	218	1°W	9°W													
2400		8245.80	16.1	80.4	208	208	218	1°W +0.8	9°W	8	250	20	7	300	6	97	02	1027.5	11.1	11.1	11.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	370.2			

1973

FROM PORTLAND

TO LISBON

OR AT SEA

REMARKS

Initials of the Officer of the Watch

				0024 { 50° 14.5' N - DECCA { 2° 37.8' W	
				0152 { 50° 00.0' N - DECCA { 3° 03.2' W	
				0300 { 49° 49.0' N - DECCA { 3° 24.8' W	
0308 - a/c 240°				0342 { 49° 43.0' N - DECCA { 3° 40.0' W	JLB
0345 - a/c 230°				0405 { 49° 39.2' N - DECCA { 3° 47.0' W	
0430 Commenced Flushing Exercise.				0530 { 49° 24.5' N - DECCA { 4° 14.5' W	
0530 Exercise completed.				0642 { 49° 15.4' N - DECCA { 4° 32.0' W	
0700 Sp. 14.				0733 { 49° 05.5' N - DECCA { 4° 49.5' W	
0759 - SUNRISE NAV LTS 9/4 OFF				0845 { 48° 57.2' N - DECCA { 5° 05.0' W	
0825 - a/c 240 0835 - a/c 218 0851 - a/c 290 sp 12					
0829 - a/c 260 0834 - sp 18					
0833 - a/c 230 0840 - FLYING STATIONS					
0904 - RAS STATIONS B & R CLOSED UP 0937 - SP 12					
0921 - SP 8					
0922 - RAS SSD CLOSED UP					
1012 - THREE MEN INJURED ON FALMOUTH'S FORECASTLE 1027 a/c 205 1052 - VIS LOWERED TO 1/2 MILE					
1018 - FALMOUTH SLIPPED 1037 a/c 180 1059 - FLYING STATIONS 1014 { 48° 49.5' N DECCA { 5° 21.5' W					
1023 - RAS STATIONS & SSD SECURED 1039 a/c 205					
1128 - STRETCHER PARTY MUSTERED IN HANGAR 1158 - ISW Helo recovered, medevac onboard					
1138 - SP 13					
1139 - a/c 290				1133 { 48° 49.6' N DECCA { 5° 31.3' W	JMB
1201 - a/c 205 sp. 19 1215 - PT assumed guide, a/c 205 sp. 16					
1210 - a/c 200					
1213 - a/c 195					
1214 - G sp. 16					
1220 { 48° 42.0' N DECCA { 05° 38.0' W					
1245 - Flying Stations					
				1341 { 48° 22.7' N DECCA { 05° 52.2' W	
1408 - a/c 290 1413 - Helo airborne with CHORE J.W.H. WEVERS, R.W.D, CSNF onboard 1458 - a/c 290					
1410 - sp. 12 1422 - Helo recovered 1429 - a/c 205 sp. 16 1500 - a/c 300					
1411 - a/c 270 1423 - Helo airborne secured flying stations 1442 - flying stations					
				1433 { 48° 16.7' N DECCA { 06° 02.0' W	
1504 - a/c 205 1515 - a/c 205					
1510 - a/c 300 1523 - Stood down flying stations					
1514 - Helo recovered 1545 - flying stations					
1610 a/c 305. Launched Helo 39. a/c 205. Secured Flying Str.					
				1615 { 47° 56.8' N - DECCA { 6° 20.0' W	
1716 Sunset. Switched on Nav Lts.					
				1730 { 47° 41.8' N - DECCA { 6° 30.5' W	
				1848 { 47° 24.0' N - DECCA { 6° 44.5' W	
				1940 { 47° 14.0' N - DECCA { 6° 51.0' W	JLB
2016 - a/c 208°					
				2019 { 47° 11' N DECCA { 6° 53' W	
				2110 { 46° 52' N - LORAN { 7° 07' W	
				2220 { 46° 45' N - LORAN { 7° 09' W	
				2330 { 46° 31' N - LORAN { 07° 19' W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	49° 02.2' N	04° 56.0' W	0800 Decca				
1200	48° 49.6' N	05° 37.4' W	1203 DECCA				
2000	47° 10.0' N	06° 54' W	2000 LORAN				STEAMING

HMCS PROTECTEUR

SUNDAY

28TH OF

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		8260.30	16.1	80.3	208	208	219	1 3/4 W	9 1/4 W												
0200		8275.45	16.1	80.3	208	208	220	2 1/4 W	9 3/4 W												
0300		8290.20	16.1	80.4	208	208	221	3 W	10 W												
0400	0	8305.50	16.0	80.3	208	208	221	2 3/4 W	10 1/4 W	8	325	22	6	300	8	98	02	1029.0	11.7	11.7	12.8
0500		8319.81	16.1	80.7	208	208	221	2 3/4 W	10 1/4 W												
0600		8334.25	16.0	80.2	208	208	221	2 3/4 W	10 1/4 W												
0700		8348.65	16.0	80.1	208	208	221	2 3/4 W	10 1/4 W												
0800	0	8363.62	16.0	80.1	208	208	221	2 3/4 W	10 1/4 W	8	010	14	4	300	6	98	40	1030.0	11.1	11.1	13.3
0900		8378.43	16.0	80.1	208	208	220	2° W	10° W												
1000		8393.20	16.0	80.0	208	208	220	2° W	10° W												
1100		8408.08	16.1	80.3	208	208	220	2° W	10° W												
1200	0	8422.69	16.0	80.0	208	208	220	2° W	10° W	8	010	15	4	320	4	98	02	1031.0	11.7	11.7	13.9
1300		8438.00	16.1	80.3	208	208	220	2° W	10° W												
1341					208	208	220	2° W	10° W												
1400		8450.70	14.9	74.5	345	345	356	1° W	10° W												
1500		8461.78	12.1	60.3	345	345	356	1° W	10° W												
1600	0	8477.70	17.4	88.8	180	180	192	2° W	10° W	4	020	10	4	320	2	98	02	1030.0	11.1	11.6	13.4
1700		8494.98	17.5	89.8	180	180	196	6 1/2 W	9 1/2 W												
1800	0	8516.91	17.5	89.9	180	180	196	6 1/2 W	9 1/2 W	5	035	15	3	070	3	98	02	1024	11.7	11.7	14.4
1900		8528.80	17.5	89.9	180	180	195	5 1/2 W	9 1/2 W												
2000	0	8545.40	17.5	89.8	180	180	194	4 3/4 W	9 1/2 W	6	025	22	3	040	5	98	03	1028.0	11.7	11.7	14.4
2100		8560.15	16.1	80.7	180	180	194	4 3/4 W	9 1/2 W												
2200		8576.10	16.0	80.0	180	180	194	4 3/4 W	9 1/2 W												
2300		8591.20	16.0	80.0	180	180	194	4 3/4 W	9 1/2 W												
2400	0	8606.00	16.0	80.1	180	180	194	4 3/4 W	9 1/2 W	2	000	15	2	025	5	98	01	1025.0	15.0	13.3	14.4

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	387.1			

19 73 FROM PORTLAND TO LISBON , OR AT SEA

REMARKS		Initials of the Officer of the Watch
0030 Commenced Flashes. 0055 Exercise completed.	0050 { 46° 06.0' N 9° 40.0' W LORAN	
	0230 { 45° 47.0' N 9° 50.0' W LORAN.	
	0405 DECCA { 45° 16.5' N 08° 18.0' W	
	0541 DECCA { 44° 56' N 08° 34.5' W	
	0630 DECCA { 44° 46' N 08° 43' W	
0755 - SUNRISE NAV LTS FW OFF	0728 DECCA { 44° 33' N 8° 53' W	DAS
	0849 DECCA { 44° 14.0' N 9° 07.0' W	
	1000 DECCA { 43° 58.0' N 9° 20.0' W	
	1051 DECCA { 43° 46.5' N 9° 29.0' W	
	1145 DECCA { 43° 34.5' N 9° 35.8' W	
	1225 DECCA { 43° 25.2' N 9° 42.0' W	
1320 - HANDS TO FLYING STATIONS 1330 - HANDS TO REPLENISHMENT STATIONS 1345 - RAS SSD CLOSED UP 1341 - SPI2 - A/C 015	1342 - HELO 29 ON DECCA 1347 - HELO 39 LAUNCHED SECURED FLYING STATIONS 1352 - A/C 345 SPI2	1331 DECCA { 43° 00' N 09° 54' W
1400 - HMCS MARGAREE ALONGSIDE PORT 1403 - USS SEMMES ALONGSIDE STBD 1407 - FIRST LINE PASSED TO HMCS MARGAREE 1409 - FIRST LINE PASSED TO USS SEMMES	1450 - HMCS MARGAREE SLIPPED 1457 - USS SEMMES SLIPPED 1459 - SECURED RAS STATIONS + RAS SSD 1500 - AC 180° SPI2	1500 DECCA { 43° 24' N 10° 00' W
		1550 DECCA { 43° 09' N 10° 00' W
		1640 DECCA { 42° 55.1' N 10° 00.8' W
1750 Sunset.		1727 DECCA { 42° 42.5' N 10° 01.2' W
1900 Flying Strm.		1849 DECCA { 42° 22.0' N 10° 00.0' W
1930 a/c 030. 1931 Launched Helo B3. a/c 180. Secured Flying Strm.		1944 DECCA { 42° 05.0' N 10° 00.0' W
2007 - SPI 16		2029 DECCA { 41° 52.8' N 10° 00.0' W
		2121 DECCA { 41° 40.5' N 10° 00.0' W
		2203 DECCA { 41° 24' N 10° 00' W
		2314 DECCA { 41° 12.8' N 10° 00.0' W

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	44° 27' N	9° 00' W	0800 DECCA				STEAMING
1200	43° 31.5' N	9° 39.0' W	1200 DECCA				
2000	42° 00' N	10° 00' W	2000 DECCA				

HMCS PROTECTEUR

MON DAY

29TH OF JANUARY

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		8620.96	16.0	80.1	180	180	194	4 1/4 W	9 1/4 W												
0200		8636.00	16.0	80.0	180	180	194	4 1/4 W	9 1/4 W												
0300		8651.05	15.9	79.6	180	180	194	4 1/4 W	9 1/4 W												
0400	0	8666.54	15.9	79.6	180	180	194	4 1/4 W	9 1/4 W	0	350	15	2	030	4	98	00	1025.5	13.3	12.2	15.0
0500		8681.42	15.9	79.6	180	180	194	5° W	9° W												
0600		8696.00	15.4	77.3	180	180	194	5° W	9° W												
0700		8707.20	12.1	60.2	180	180	194	5° W	9° W												
0800	0	8718.94	12.2	60.4	180	180	194	5 1/4 W	8 3/4 W	4	350	15	2	030	3	98	03	1026.0	13.3	12.2	15.6
0900		8730.15	13.3	66.1	VAR	VAR	VAR	VAR	8 3/4 W												
1000		8742.8	13.9	69.5	VAR	VAR	VAR	VAR	8 3/4 W												
1100		8755.05	13.5	67.6	VAR	VAR	VAR	VAR	8 1/2 W												
1200	0	8768.50	14.8	73.9	VAR	VAR	VAR	VAR	8 1/2 W	4	030	10	1 1/2	010	2	98	03	1026.4	17.2	15.4	15.6
1209					180°	180°	194°	4° W	10° W												
1300		8786.00	16.1	90.3	210°	210°	221°	1° W	10° W												
1400		8801.30	12.9	84.8	210°	210°	221°	1° W	10° W												
1412					210	210	221	1° W	10° W												
1430					165	165	177	2° W	10° W												
1500		8812.00	13.6	66.8	210	210	221	1° W	10° W												
1600	0	8825.23	12.1	60.3	210	210	221	1° W	10° W	7	350	12	1	020	3	98	02	1025.6	15.0	13.3	16.1
1700		8836.69	12.0	60.1	210	210	221	1° W	10° W												
1800	Z	8848.55	12.0	60.0	VAR	VAR	VAR	VAR	10° W	8	350	12	1	350	2	98	03	1025.5	15.0	13.3	16.1
1900		8861.35	15.2	76.3	VAR	VAR	VAR	VAR	10° W												
2000	0	8878.50	18.2	93.9	VAR	VAR	VAR	VAR	10° W	8	035	18	1	350	2	98	02	1026.0	16.1	12.8	16.1
2030					VAR	VAR	VAR	VAR													
2100		8894.70	17.5	88.5	305	305	318	3° W	10° W												
2150					305	305	318	3° W													
2154					020	020	032	2° W													
2200		8905.60	15.1	76	300	300	313	3° W	10° W												
2300		8920.90	13.1	68.1	VAR	VAR	VAR	VAR	10° W												
2315					VAR	VAR	VAR	VAR													
2400	0	8931.60	12.0	59.9	110	110	123	3° W	10° W	8	000	12	1	350	2	98	02	1028.0	13.9	12.7	16.1

Distance run through the Water
Midnight to
Midnight

344.7

Leave Granted to Ship's Company

Anchor Bearings

1973 FROM PORTLAND TO LISBON, OR AT SEA

REMARKS

Initials of the Officer of the Watch

				0200 { 40° 26.0 N DR { 10° 00.0 W	
				0400 { 39° 49.8 N DR { 10° 00.0 W	JT
0502 - Berlinga Lt Ho 117 0531 - Berlinga Lt Ho 100 0548 - Sp 12 kts					
0632 - Berlinga Lt Ho. 06B				0632 { 39° 16.0 N DR { 9° 58.0 W	
0748 - Sunrise Nav Lgt off. 0800 Commenced own manoeuvres. Cos. and Speeds as required.				0800 { 38° 54.5 N DR { 10° 00.0 W	P JLB
0910 Completed own manoeuvres. Co 18B. Sp. 12. 0930 Commenced Simulated Tactical Exercise. Commenced ZigZag. Cos. and Speeds as required for exercise and zigzag.				1000 { 38 36.8 N D.R. { 9.540 W	
1028 Emergency Stms. Surface Defence Stms. 1044 Shelter Stms. 1055 Secured Shelter Stms. Reverted to Emergency Stms. 1045 Flying Stms.					
1108 Secured Emergency Stms. 1120 Conducted VERTREP with ISAAC SWEERS helo. Stood down Flying Stms. 1130. Exercise complete. Co. 18B. Sp 18.				1135 { 38 27.3 N D.R. { 9.54.5 W	J
1209 - a/c 210					
1340 - SP 15					
1412 - a/c 1650					
1430 - a/c 210° SP 12 - HANDS TO REPLENISHMENT STATIONS 1445 - RAS SSD CLOSED UP					
1502 - SEMMES ALONGSIDE STBD 1503 - STAVANGER ALONGSIDE PORT 1505 - FIRST LINE PASSED TO STAVANGER 1506 - FIRST LINE PASSED TO SEMMES	1536 - SEMMES SLIPPED 1543 - MARGAREE ALONGSIDE STBD 1545 - FIRST LINE PASSED TO MARGAREE 1546 - STAVANGER SLIPPED	1551 - FALMOUTH ALONGSIDE PORT			
1641 - Margaree slipped 1642 - Falmouth slipped					JMB
1703 - Isaac SWEERS alongside port 1733 - A/c 205 1735 - A/c 200	1736 - A/c 195 1738 - A/c 190 1739 - A/c 185	1740 - A/c 180 1756 - Isaac SWEERS slipped 1757 - Secured RAS SSD and Replenishment Stations 1759 - A/c 090 1849 - A/c 357 1856 - A/c 354 1900 - A/c 325	1551 - FALMOUTH ALONGSIDE PORT 1640 { 37° 29.0' N 10° 35.0' W 1730 { 37° 15.0' N 10° 40.2' W		JAE
1803 - Sunset, Navigation lights switched on. 1830 - a/c 550 Sp 18 1830 - COMMENCED SERIAL 2929					
1906 - a/c 320 1907 - a/c 315 1912 - a/c 310					
2030 - A/c 305 2040 - Sp 15 kts 2046 - Sp 15				1923 { 37° 27' N LOPAN { 10° 30' W	J
2135 - Hands to Flying Stms 2150 - A/c 020 2155 - Helo recovered	2156 - A/c 300				
2202 - A/c 020 2203 - Helo launched 2204 - A/c 295 Sp 18 2210 - Stood down Flying Stms	2224 - Sp 10 kts 2235 - A/c 305 2240 - Sp 12 kts			2130 { 37° 29.0 N LOPAN { 11° 10.5 W	
2315 - A/c 110				2359 { 37° 29.0 N DR { 11° 21.0 W	JLB

Position	Latitude	Longitude	Depending on	'Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	38° 54.5 N	10° 00.0 W	DR				STEAMING
1200	38° 18.3 N	09° 54.5 W	DR				
2000	37° 29.8 N	10° 31.2 W	DR FM 1923 FIX				

HMCS PROTECTEUR TUESDAY 30th OF JANUARY

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		8942.93	12.0	59.9	110	110	123	30W	100W												
0200		8954.07	12.0	60.0	110	110	123	30W	100W												
0300		8965.50	12.0	59.8	110	110	123	30W	100W												
0400	Ø	8975.55	2.9	54.6	195	195	207	20W	100W	8	335	14	1	350	3	98	02	1027.0	15.0	12.2	15.6
0500	Ø	8992.01	2.2 5.8 8.2	39.6	240	240	252	20W	9 1/2W												
0600		8990.40	8.0	39.3	240	240	252	30W	9W												
0700	Ø	9000.00	6.0	49.7	150	150	162	30W	9W												
0800	Ø	9010.60	12.2	58.3	VAR	VAR	VAR	VAR	8 1/2W	8	025	12	1	000	2	98	02	1028.5	12.8	13.7	15.6
0900		9021.81	13.1	64.6	VAR	VAR	VAR	VAR	8 1/2W												
1000		9030.60	10.8	51.5	330	330	340	1 1/2W	8 1/2W												
1100		9039.60	10.7	50.9	335	335	345	1 1/2W	8 1/2W												
1200	Ø	9048.72	10.1	50.3	335	335	345	1 1/2W	8 1/2W	8	015	10	2	000	3	98	02	1031.5	13.9	11.1	15.6
1300		9057.85	10.1	50.6	335	335	345	1 1/2W	8 1/2W												
1400		9067.63	11.0	55.5	030	030	040	1 1/2W	8 1/2W												
1500		9073.78	13.0	65.7	300	300	310	1 1/2W	8 1/2W												
1600	Ø	9091.82	14.4	72.2	VAR	VAR	VAR	VAR	8 1/2W	8	015	10	2	000	3	98	02	1032.0	13.8	11.7	15.0
1700		9105.09	5.3	72.4	020	020	029	1 1/2W	8 1/2W												
1800	Ø	9117.60	14.3	72.1	VAR	VAR	VAR	VAR	8 1/2W	7	040	16	4	040	3	98	01	1033.0	13.3	13.9	15.0
1900		9133.32	17.2	89.9	VAR	VAR	VAR	VAR	8 1/2W												
2000	Ø	9145.88	13.2	67.2	315	315	325	1 1/2W	8 1/2W	8	045	11	2	045	4	98	02	1033	13.3	13.3	15.6
2100		9161.74	17.9	90.0	VAR	VAR	VAR	VAR	8 1/2W												
2200		9178.30	17.9	90.3	VAR	VAR	VAR	VAR	8 1/2W												
2300		9189.26	11.9	59.4	VAR	VAR	VAR	VAR	8 1/2W												
2400	Ø	9201.96	15.3	76.7	070	070	080	1 1/2W	8 1/2W	8	330	18	3	000	4	98	02	1035.0	12.8	11.7	15.6

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
300.5		

1973 FROM PORTLAND TO LISBON ; OR AT SEA

REMARKS

Initials of the Officer of the Watch

						0100 { 49°34.8'N DR { 11°07.5'W	
						0200 { 37°30.2'N DR { 10°52.8'W	
						0300 { 37°21.1'N DR { 10°38.1'W	
0340- Alc 195, Sp. 8; SNF arrayed in circular screen, PT guide.						0400 { 37°21.2'N DR { 10°28.9'W	AKG
0425 a/c 240°						0500 { 37°16.0'N D.R. { 10°36.0'W	
						0600 { 37°11.0'N D.R. { 10°45.0'W	
0630 a/c 150° Sp. 12.						0635 { 37°06.5'N LRN { 10°47.0'W	
0742 a/c 210° 0746 a/c 270° 0748 a/c 340° 0750 Sunrise 0800 Cos. and Speeds as req. to take str. 060 - FRANKENLAND 2000.						0800 { 36°58.8'N D.R. { 10°39.4'W	
0830 Took str. 060 - FRANKENLAND. 2000. Co. 330 Sp. 10. 0840 - SECURED FLYING STATIONS							
0907- a/c 290 0950- STOOD DOWN FLYING STATIONS 0935- HAND TO FLYING STATIONS 0940- a/c 220 1015- a/c 335						0905 { 37°18.5'N DR { 10°47.7'W	
						1100 { 37°32.6'N DR { 11°02.5'W	
							ST
						1230 { 37°40.0'N LORAN { 11°20.0'W	
1327- Alc 030 sp 12 kts							
1420- Alc 330 1433- Alc 300 sp 15 kts						1440 { 38°00.0'N LORAN { 11°17.0'W	
1529- FLYING STATIONS 1539- RECOVERED NPL0 03 1535- Alc 350 1539- Alc 300 1536- Alc 000 1545- SECURED FLYING STATIONS							JP
1638 a/c 020°						1623 { 38°14.0'N LORAN { 11°41.8'W	
1710 a/c 300. 1739 Green Flares 190°-195° 1739 a/c 000 1752 Green Flares 180°-200°						1730 { 38°30.5'N DR { 11°43.8'W	
1810- a/c 270° SP19 1840- a/c 020 1825- a/c 000° 1845- a/c 000 - SECURE FLYING STATIONS 1825- HAND TO FLYING STATIONS 1853- a/c 315- SP15 1905- Sp 10 1934- COMMENCED ZIGZAG PLAN II SP10 Base Course 315°						1855 { 38°49.2'N DR { 11°52.7'W	
						2000 { 39°00.3'N DR { 12°07.6'W	ST
2110- Alc 270 2126- Alc 325 2130- Alc 270						2200 { 39°14.5'N DR { 12°44.0'W	
2215- Sp 8 kts 2217- Resumed Zig Zag Base Co 270 Cos Spas req'd. 2247- Alc 000 Sp 15 kts							
2303- Sp 10 kts 2310- Cos Spas req to take str 2337- In str 3/4 070 sp 13 kts						2359 { 39°14.0'N DR { 12°50.5'W	JP

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	36° 58.8' N	11° 34.4' W	DR from 0635 FIX				STEAMING
1200	37° 37.6' N	11° 14.3' W	DR				
2000	39° 00.3' N	12° 07.6' W	DR				

HMCS PROTECTEUR

WEDNESDAY

31 OF JANUARY

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		9214.34	13.1	65.9	070	070	080	1/2w	8 1/2w												
0200		9226.66	13.7	68.7	070	070	080	1/2w	8 1/2w												
0300		9239.14	13.2	66.3	070	070	080	1/2w	8 1/2w												
0400	Ø	9252.00	13.7	68.7	070	070	080	1/2w	8 1/2w	7	320	18	1	000	2	98	01	1035.0	14.4	10.6	15.0
0500		9264.20	13.3	66.6	070	070	080	1/2w	8 1/2w												
0600		9276.21	13.2	66.0	070	070	080	1/2w	8 1/2w												
0625					070	070	080	1/2w	8 1/2w												
0700		9287.65	13.6	67.9	055	065	065	1/2w	8 1/2w												
0735					055	055	065	1/2w	8 1/2w												
0800	Ø	9298.91	14.0	70.5	090	090	100	1/2w	8 1/2w	7	340	25	3	020	3	98	02	1034	12.8	11.1	15.0
0900		9309.35	10.9	54.6	VAR	VAR	VAR	VAR	8 1/2w												
1000		9320.51	12.6	63.6	VAR	VAR	VAR	VAR	8 1/2w												
1100		9328.96	10.2	51.3	VAR	VAR	VAR	VAR	8 1/2w												
1200	Ø	9338.96	11.1	55.3	180	180	193	1/2w	8 1/2w	8	340	20	3	020	3	98	03	1034.0	12.8	10.6	15.0
1235			7.0		180	180	193	4 1/2w	8 1/2w												
1300		9352.81	8.9	74.7	230	230	243	4 1/2w	8 1/2w												
1400		9364.91	18.6	95.2	230	230	243	4 1/2w	8 1/2w												
1425			15.60		230	230	243	4 1/2w	8 1/2w												
1449			1.6		Ø10	Ø10	Ø22	3 1/2w	8 1/2w												
1500		9382.78	1.8	80.4	230	230	243	4 1/2w	8 1/2w												
			12.7		230	230	243	4 1/2w	8 1/2w												
1600	Ø	9396.45	14.5	72.0	230	230	243	4 1/2w	8 1/2w	8	Ø40	20	5	Ø20	4	98	Ø2	1033.0	12.8	14.4	15.6
1610					180	180	193	4 1/2w	8 1/2w												
1640					185	185	193	4 1/2w	8 1/2w												
1700		9408.55	14.1	70.6	Ø10	Ø10	Ø23	4 1/2w	8 1/2w												
1731					125	125	138	4 1/2w	8 1/2w												
1800	Ø	9423.56	16.2	82.6	145	145	158	4 1/2w	8 1/2w	8	020	20	3	000	4	98	02	1033.5	13.9	12.2	16.1
1900		9438.38	17.2	86.7	VAR	VAR	VAR	VAR	8 1/2w												
2000	Ø	9453.49	17.8	91.4	VAR	VAR	VAR	VAR	8 1/2w	8	020	20	3	000	3	98	02	1033.0	13.9	12.2	16.1
2100		9465.55	14.3	71.6	VAR	VAR	VAR	VAR	9 1/2w												
2200		9480.65	16.7	84.8	VAR	VAR	VAR	VAR	8 1/2w												
				14.30																	
2300		9491.40	13.0	64.6	VAR	VAR	VAR	VAR	8 1/2w												
2400	Ø	9502.45	13.7	68.7	VAR	VAR	VAR	VAR	8 1/2w	4	Ø10	20	3	Ø50	4	98	Ø2	1033	13.3	10.6	15.6

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	340.7			

**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 of the compass (22½ degrees), so fixed as to show the light 10 points (112½ degrees) on each side of the vessel, that is, from right ahead to 2 points (22½ degrees) abaft the beam on either side, and of such a character as to be visible at a distance of at least 5 miles.
- (ii) Either forward of or abaft the white light mentioned in subsection (i) a second white light similar in construction and character to that light. Vessels of less than 150 feet in length, and vessels engaged in towing, shall not be required to carry this second white light but may do so.
- (iii) These two white lights shall be so placed in a line with and over the keel that one shall be at least 15 feet higher than the other and in such a position that the lower light shall be forward of the upper one. The horizontal distance between the two white lights shall be at least three times the vertical distance. The lower of these two white lights or, if only one is carried, then that light, shall be placed at a height above the hull of not less than 20 feet, and, if the breadth of the vessel exceeds 20 feet, then at a height above the hull not less than such breadth, so however, that the light need not be placed at a greater height above the hull than 40 feet. In all circumstances the light or lights, as the case may be, shall be so placed as to be clear of and above all other lights and obstructing superstructures.
- (iv) On the starboard side a green light so constructed as to show an unbroken light over an arc of the horizon of 10 points of the compass (112½ degrees), so fixed as to show the light from right ahead to 2 points (22½ degrees) abaft the beam on the starboard side, and of such a character as to be visible at a distance of at least 2 miles.
- (v) On the port side a red light so constructed as to show an unbroken light over an arc of the horizon of 10 points of the compass (112½ degrees), so fixed as to show the light from right ahead to 2 points (22½ degrees) abaft the beam on the port side, and of such a character as to be visible at a distance of at least 2 miles.
- (vi) The said green and red side lights shall be fitted with inboard screens projecting at least 3 feet forward from the light, so as to prevent these lights from being seen across the bows.

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

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

Rule 3

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

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

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

Rule 4

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

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

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

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

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

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

Rule 5

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

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

Rule 6

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

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

Rule 7

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

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

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

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

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

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

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

Rule 8

- (a) (i) Sailing pilot-vessels, when engaged on their station on pilotage duty and not at anchor, shall not show the lights prescribed for other vessels, but shall carry a white light at the masthead visible all round the horizon at a distance of at least 3 miles, and shall also exhibit a flare-up light, or flare-up lights at short intervals, 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 taxiing 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 fr000763

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

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

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

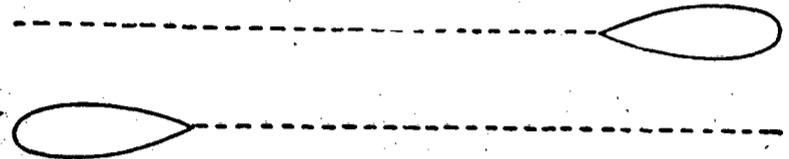
The following diagrams are intended to illustrate the steering and sailing rules:

First Situation



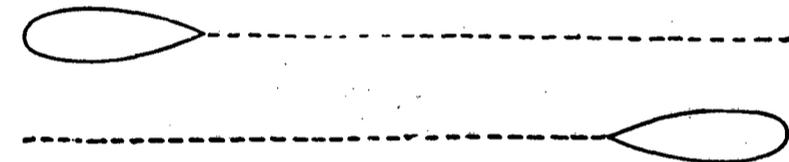
Here the two coloured lights visible to each will indicate their direct approach end on to each other. In this situation it is a standing rule that both shall direct their courses to starboard and pass on the port side of each other, each having previously given one distinct blast of the whistle.

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.

