Library and Archives Canada
Gatineau, Quebec
K1A 0N4

Bibliothèque et Archives Canada
Gatineau (Québec)
K1A 0N4

Canada

CNS. 322 (Revised 1963)

7530-21-562-1292

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

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

HMCS PROTECTEUR

Class of Ship AOR

SHIP'S LOG

FOR

Month of APRIL **19** 70

Days at Sea	17
Days in Harbour	13
Total Distance Run	4972

H.J. Duncan LCDR.
Navigating Officer.

Captain.

Senior Officer in Command.

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

48.31 — TOUCHING GROUND AND COLLISIONS

(1) When one of Her Majesty's Canadian Ships touches ground or is involved in a collision with another vessel, or with a floating or sunken object, every effort shall be made to obtain the exact position of the ship at the time of the accident, and an entry shall be made in the ship's log giving the position and the method by which it was obtained. (*See article 71·4803—"Report of Touching Ground and Collisions."*)

(2) *Possibility of Damage.* When one of Her Majesty's Canadian Ships comes into such close proximity to another vessel that there is a possibility of damage, being sustained by either the ship or the vessel, the details listed in article 71·4803—(Report of Touching Ground and Collisions) shall be carefully noted.

(3) *Preservation of Records.*

(a) When a collision or narrow escape from a collision occurs, or the ship has touched ground, the Captain shall ensure that the following items are preserved:
- (i) the Ship's Log Book,
- (ii) all Engine Room Registers,
- (iii) the Navigating Officer's Note Book,
- (iv) the Officer of the Watch's Note Book,
- (v) the plot, if one was in use,
- (vi) the charts by which Her Majesty's Canadian Ship was being navigated at the time,
- (vii) if the ship has touched ground, the echo sounding machine trace, and
- (viii) the Operations Room Log.

(b) Entries in the records shall not be erased, but if correction is found necessary, the entry shall be crossed through and initialled. Subsequent marking or amendment of the chart or plot shall not be made in any circumstances, other than the use of the chart for the continued safe navigation of the ship.

(4) *Collisions with Docks or Basins.* When a ship collides with or bears hard against the side of a dock or basin, the relevant reports prescribed in Article 71·4803—(Report of Touching Ground and Collisions) shall be made.

48.54 — SHIP's LOG

(1) *Responsibility.* The Navigating Officer shall have charge of the Ship's Log (Form C.N.S. 322). He shall be responsible for its maintenance, storage and disposal and he shall see that it is produced for inspection at the proper times.

(2) *Entries.* Entries in the Ship's Log shall be made in pencil and shall include:

(a) *general*
- (i) the employment of the ship's company,
- (ii) holding Divine Service and reading of prayers,
- (iii) leave granted, stating in which watch or part of the watch,
- (iv) joining and leaving, rank and name of officers, total number of men only,
- (v) general payments,
- (vi) offences committed by officers and punishments requiring warrants, the serial numbers being given (see Article 101·11—Logging Conduct of Officers),
- (vii) every alteration of clocks (to be noted in the remarks column),
- (viii) the time kept each day at noon,
- (ix) salutes and ceremonies, half-masting and re-hoisting of colours,
- (x) dressing ship, stating the reason,
- (xi) evolutions, exercises and landings of parties for service or drill,
- (xii) closing and opening of water-tight doors, or damage control state where applicable,
- (xiii) embarkation and disembarkation of passengers,
- (xiv) details and times of any accident or death occurring on board,
- (xv) notation of any births, baptisms and marriages which take place on board,
- (xvi) notation of damage to, or loss of, important store articles or fixtures, making reference, where necessary, to details in lists kept with store accounts,
- (xvii) terms entered into when engaging a pilot,
- (xviii) any occasion of touching ground or being in collision,
- (xix) any relevant information concerning fishing vessels or gear in the vicinity,
- (xx) the description of weather, wind and sea, the corrected barometer reading and any unusual phenomenon on completion of each watch and at least every hour during threatening weather,
- (xxi) all occasions of testing boats, life rafts, night lifebuoys and their releasing gear,
- (xxii) notation of corrections to meteorological instruments,
- (xxiii) matter whose entry is required by regulations, and
- (xxiv) other important occurrences;

(b) *when in harbour*
- (i) daily notice of main engines for steam at noon and on any alteration,
- (ii) arrival and departure of any ship of Her Majesty's forces, of ships-of-war of another nation and movements of other vessels should they be of interest,
- (iii) names or descriptions of any vessels, lighters, barges or similar craft berthing alongside, with the time of arrival and departure and a statement of the purpose of their coming,
- (iv) damage caused by or to vessels berthing alongside;

(c) *when proceeding to or on arrival from sea*
- (i) times of weighing or slipping and proceeding,
- (ii) times of anchorage or mooring the ship, giving depth of water, amount of cable veered and position by bearings of each anchor; and of securing the ship to a wharf or buoy,
- (iii) the draught of water, fore and aft, before sailing and on arrival in harbour,
- (iv) times of embarking and disembarking a pilot,
- (v) if a pilot is relieved of his duties, the time the action was taken;

(d) *when at sea*
- (i) meeting or finding at anchor of any ship of Her Majesty's forces, a ship of war of another nation, and any other vessel whose presence or movement is of interest,
- (ii) every occurrence connected with the navigation and pilotage of the ship,
- (iii) all discovered or suspected dangers,
- (iv) the set and velocity of currents and tidal streams encountered,
- (v) results of observations made and angles or bearings taken to ascertain the ship's position, currents between noon and noon, and currents experienced on leaving and making land or when running along the land (with the number of hours between observations),
- (vi) the behaviour of the ship during threatening or stormy weather shall be noted occasionally,
- (vii) when in company, the position of the leading ships and, if out of station, the particulars concerning all ships involved, if known),
- (viii) details of aircraft sighted, together with the time of observation (and marks of identification, if known). Movements of aircraft working with the fleet need not be entered unless of unusual interest.

(3) *Signatures and Initials.* The Ship's Log shall be:

(a) initialled by the Officer of the Watch or the Officer of the Day when he is relieved;

(b) signed by the
- (i) Captain weekly,
- (ii) Senior Officer in Command monthly,
- (iii) Inspecting Officer at inspections of the ship,
- (iv) Navigating Officer upon supersession.

(4) *Corrections.* No erasures shall be made in the Ship's Log. When it is necessary to make a correction, a single line shall be drawn through any error and the necessary entry made. The alteration shall then be initialled by the officer who made the original entry.

(5) *Inspections.* The Ship's Log shall be inspected by the:

(a) Captain weekly; (*See article 45.47—"Inspection of Ship's Books by Captain".*)

(b) Senior Officer in Command monthly;

(c) Inspecting Officer at Inspections of the ship. (*See article 45.46—"Inspection of Ship's Books by Senior Officer in Command".*)

(6) *Disposal.* The Ship's Log shall be:

(a) Placed in the cover for Current Ship's Log Book (Form C.N.S. 321A) and kept on the bridge or at the gangway when in use;

(b) forwarded to the Senior Officer in Command on completion; (*See (3) (b) of this article*)

(c) returned to the ship after the Senior Officer in Command has signed it, and placed in the Cover for Completed Ship's Log Books (Form C.N.S. 321B) and retained on board;

(d) forwarded to Naval Records Centre, Sydney, N.S., in batches of twelve:
- (i) commencing on the second anniversary of the first Log of the series, and
- (ii) annually thereafter.

CNS. 322

SHIP'S LOG BOOK

For use at Sea and in Harbour

1. The Log Book is to be carefully preserved. When in use, it is to be kept in the covers provided. When filled, it is to be taken charge of by the Captain, and, after inspection by the Senior Officer in Command, kept on board for reference, if required. Logs shall be forwarded, in batches of twelve, on the expiration of two years from the first log of the series.

2. The Officer of the Watch is responsible for the Log, and for the due observance of the regulations respecting it; and he is to see that it is properly written up, in pencil, and he will sign it with the initials of his name before he leaves the Deck.

3. The Log reading is to be entered hourly in the column provided for the purpose. In the column marked "Distance Run", the distance through the water for each hour is to be registered according to the judgment of the Officer of the Watch, using the Log readings, their errors, if known and the Revolutions as a guide, with allowances for the wind and sea. When the ship has steered on more than one course during the hour, the distance run on each course must be entered.

4. The Standard or Gyro Compass Course, the Direction and Force of the Wind, the State of the Weather, Sea and Swell, are to be registered at the end of each Watch, and when any change occurs.

5. The corrected Barometric Pressure in millibars and the Air and Sea Temperatures are to be registered at 0400, 0800, 1200, 1600, 2000 and 2400; and in stormy weather the corrected Barometric Pressure in millibars is to be registered every hour. Aneroid barometers should be kept corrected to mean sea-level pressure.

6. In recording the Force of the Wind and State of the Weather, Sea and Swell, the scheme on the facing page is to be adopted.

7. The mean number of revolutions of the Engines per minute is to be registered hourly in the column for that purpose.

8. When in sight of Land, or of any known danger, cross bearings of, or angles between, well-defined objects, should be recorded at frequent intervals, and entered in the Log at least once in each Watch, for the information of the relieving Officers. The time of first sighting, and the bearing of land or any marks, and of first obtaining soundings, with the results, are to be recorded.

9. In the space left for *Remarks*, must be recorded full information on all matters of importance or interest; as detailed in QRCN Article 48.54 of which a copy is printed on this form.

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

PRESENT WEATHER CODE (ww)

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

00-03 CHANGE OF SKY IN LAST HOUR

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

04-10 HAZE, ETC.

04 Smoky
05 Dry haze
06 Widespread dust
07 Dust raised near station } Not for
08 Dust devils within last hour } marine use
09 Duststorm or sandstorm within last hour
10 Mist (visability 1/2 nautical mile or more)

11-12 SHALLOW FOG

11 In patches } Not deeper than 30'
12 More or less continuous } at sea or 6' ashore

13-17 PHENOMENA WITHIN SIGHT BUT NOT AT STATION

13 Lightning, no thunder heard
14 Precip. in sight, not reaching surface at ship
15 Precipitation beyond 3 miles, reaching surface
16 Precipitation within 3 miles, reaching surface

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

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

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

20 Drizzle
21 Rain
22 Snow
23 Rain and snow
24 Drizzle or rain, freezing
} Not in showers

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

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

Slight or moderate		*Severe*
30	Dust or sandstorm, decreasing	33
31	Dust or sandstorm, unchanging	34
32	Dust or sandstorm, increasing	35
36	Drifting snow, generally low	37
38	Blowing snow, generally high	39

40-49 FOG

40 Fog at a distance
41 Fog in patches

Sky discernible	*Visibility less than ½ mi. at time of observation*	*Sky not discernible*
42	Fog, thinning in last hour	43
44	Fog, unchanging in last hour	45
46	Begin'g or thick'g in last hour	47
48	Fog, depositing hard rime	49

50-59 DRIZZLE (Consists of numerous minute drops)

Intermittent		*Continuous*
50	Slight drizzle	51
52	Moderate drizzle	53
54	Thick drizzle	55

Slight		*Moderate or thick*
56	Freezing drizzle	57
58	Drizzle and rain	59

60-69 RAIN

Intermittent		*Continuous*
60	Slight rain	61
62	Moderate rain	63
64	Heavy rain	65

Slight		*Moderate or heavy*
66	Freezing rain	67
68	Rain or drizzle with snow	69

70-79 SOLID PRECIPITATION, NOT IN SHOWERS

Intermittent		*Continuous*
70	Slight snow in flakes	71
72	Moderate snow in flakes	73
74	Heavy snow in flakes	75

76 Ice needles
77 Granulated snow
78 Isolated starlike snow crystals
} With or without fog
79 Ice pellets

80-84 RAIN SHOWER(S)

80 Slight, with or without squalls
81 Moderate or heavy, with or without squalls
82 Violent, with squalls,
83 Slight, mixed with snow
84 Moderate or heavy, mixed with snow

85-90 SOLID PRECIPITATION IN SHOWER(S)

Slight		*Moderate or heavy*
85	Snow	86
87	Soft or small hail*	88
89	Hail* without thunder	90

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

91-94 THUNDER HEARD DURING PRECEDING HOUR BUT NOT AT TIME OF OBERSVATION

(Note, choose numbers 17 or 29 whenever applicable)

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

95-99 THUNDERSTORM AT TIME OF OBSERVATION

95 Slgt or mdt tstm without hail
96 Slight or mdt tstm with hail
97 Hvy thunderstm without hail
} Precipitation occurring at time of obsn.
98 Tstm with dust or sandstorm
99 Heavy thunderstorm with hail (Ditto)

BEAUFORT WIND SCALE AND CORRELATIVE SEA DISTURBANCE TABLE

Beaufort Scale Number	Mean Wind Speed Knots	Limits of Wind Speed in Knots	Descriptive Terms	Coastal Criterion	Sea Criterion	Approximate Equivalent Sea Disturbance Table in Open Sea* — Probable Mean Height of Waves in Feet† Maximum Height in brackets
0	0	Less than 1	Calm.....	——	Sea like a mirror.....	
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)
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)
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)
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)
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)
6	24	22—27	Strong breeze...	Smacks double-reef gaff mainsails.	Large waves begin to form; the white foam crests are more extensive everywhere. (Probably some spray).....	9½(13)
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)
8	37	34—40	Fresh gale.....	Smacks take shelter if possible.	Moderately high waves of greater length; edges of crests break into sprindrift. The foam is blown in well-marked streaks along the direction of the wind.....	18 (25)
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)
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)
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)
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
13	76	72—80				
14	85	81—89				
15	95	90—99				
16	104	100—108				
17	114	109—118				

* 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.

ABBREVIATIONS
FOR USE IN THE SHIP'S LOG

NBCD state	NBCD
Abeam	⊥
Alter course	a/c
Anchor	⚓
As requisite	as req
Base course	b/c
Bearing	bg
Cable	c
Cape	Cp
Cease fire	CF
Compass	(C)
Course	co
Course and speed	co & sp
Dead reckoning position	DR
Direction finder	D/F
Distance	dist
Distance made good	DMG
Estimated position	EP
Fathom	fm
Feet	ft
Fix by any method	fix
Green, in relative bearing	G
Harbour	Hbr
Head	Hd
High, for gyro error	H
Hour	Hr
Island	Is
Jetty	Jty
Knot	kt
Left hand edge	|←
Light	Lt
Light Buoy	Lt By
Light House	Lt Ho
Light Vessel	Lt Vsl
Low, for gyro error	L
Magnetic	(M)
Mile	m
Minute	min or '
Observed Position	OP
Open fire	OF
Point	Pt
Port	pt
Position	pos
Radar	Ra
Radar Beacon	Racon
Radio Beacon	Ro Bn
Radio Direction Finder	Ro D/F
Range	rg
Red, in relative bearing	R
Revolution	rev
Right hand edge	→|
Second	sec
Set course	s/c
Shackle	sh
Special Sea Dutymen	SSD
Speed	sp
Starboard	st
Transit	ø
True	(T)
Various	var
Visibility	vis
Wharf	Whf
Yard	⁎
Zigzag	ZZ

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 — FRIDAY — 1st OF MARCH

Time	Zone Suffix	Log (Stating type) Electro-magnetic	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		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																					
13				50	Var	Var	Var	Var	25°W												
1600	+4	0197·1	2·0							5	320	7	—	—	—	98	01	995·0	17·2	15·6	13·9
1700																					
1800										3	345	3	—	—	—	98	01	997·0	15·6	15·0	13·9
1900																					
2000	+4									0	350	2	—	—	—	98	01	999·5	15·6	15·0	13·9
2100																					
2200																					
2300																					
2400	+4									0	000	2	—	—	—	98	00	1000·0	15·0	14·4	13·9

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
200·9	Starboard and 1st of Port Watches. CPO & PO 1630 – 0755 Tuesday. LS & below 1640 – 0745 " . OSUT 1640 – 0100 " . WK 1640 – 1015 " .	1410 ⚓ { Anglican Church Steeple 348°. ← Dominion Coal Jetty 019°. → Old Railway Pt. 106°. Careening Pt. Bn. 1

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 - s/c 142° spd. 7 kts. 0211 - a/c 160°. 0221 - a/c 153°. 0229 - a/c 159° spd. 10 kts. SSD secured. 0230 - Reverted to NBCD 3. 0242 - a/c 175° spd. 15 kts. 0249 - a/c 156°. ⊙ Dartmouth Range brg. 339° by Gyro. Gyro correct.	
0310 - a/c 101° spd. 18 kts. 0326 - Outer Automatic Buoy ⊥ pt. 1.1 m. (Ra) a/c 083°. 0340 - Sambro Is. Lt. 238°. Devils Is. Lt. 310°. Shute Is. 338°.	
0450 - Egg Is. Lt. 350°, 10.45 m. (Ra.) Egg Is. Buoy 000°, ~~5.2~~ 5.7 m. (Ra.) a/c 068°	
0615 - Beaver Pt. Lt. 282° Liscombe Is. Lt. 350° Current since 0450 - Set 205° — ¼ kt. 0642 - Sunrise. Switched off Navigation lights. Gyro 2° L. by Suns Amplitude. a/c 066° (G).	
0758 - Liscombe Is. Lt. 281° County Is. Lt. 352° 0730 - Lifebuoy Sentry exercised. Lifebuoy Alarm tested.	J.E.
0800 - Divisions and prayers. 0815 - Hands employed cleaning ship.	
0930 - Hands employed painting forward messdeck. (WS) and (RP) classes to instruction. 1000 - Exercised seaboats crew. 1030 General Alarm tested.	
1016 - One man suffered broken arm while securing # 4 Carley Float. (ABBN1 - A.N. OTHER - 1234 H.). 1030 Cape Canso brg. 287° - 17.8 m. (Ra.).	
1142 - One pair binoculars Patt. #1900 A., Serial 58274, lost overboard.	
1203 - a/c 002° spd. 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 ⊥ pt. 1 m. (Ra.) a/c 275° spd. 10 knots.	
1401 - Co. and spd. as reg. for coming to ⚓. 1410 Let go pt. ⚓. 1415 Came to in 6 fms. with 3 sh. 1420 - SSD secured, ⚓ watches set. Remained at immediate notice for steam. - on deck. 1430 - Hands to General Payment.	
1500 - SSD closed up. 1508 - Shortened in to 1 sh. on deck. 1513 Weighed and proceeded. 1530 - Secured alongside Sydney & Louisburg Railway Wharf pt. side to. Reverted to 2 hours notice for steam. Co. & spd. as reg. to berth alongside.	R.J
1532 - SSD secured, reverted to NBCD 4. 1600 - ABBN1 - A.N. OTHER, 1234 - H. landed to Louisburg General Hospital. 1630 Duty watch to fire drill. 1615 - Cleared Lower Deck. Read Warrant #72.	
1754 - Sunset. 1800 - Shore patrol landed.	~~E.M.~~
1905 - Sub-Lieutenant P. Smith - O-32414 RCN, joined ship from HMCS "STADACONA". Eight men joined ship from HMCS "STADACONA".	
2300 - RCAF aircraft reported missing 50 m. SE. Louisburg. Recalled libertymen. 2330 - Came to immediate notice for steam. 2345 - Shore patrol returned on board.	R

Position	Latitude N.	Longitude W.	Depending on	Draught Time	Draught Forward	Draught Aft	Notice for Main Engines at Noon
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 WEDNESDAY 1ST OF APRIL

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										2	070	10	-	-	-	98	05	1021.2	19.4	21	
0500																					
0600																					
0700																					
0800										4	057	5				98	02	1023	22.2	25	
0900																					
1000																					
1100																					
1200	+4									0	057	10				98	02	1023	25	27	
1300																					
1400																					
1500																					
1600										1	060	10				98	02	1021.5	20.2 BH	21.7	
1700																					
1800																					
1900																					
2000										2	CALM					98	02	1021.5	26.1 BH	21.7	
2100																					
2200																					
2300																					
2400										7	060	8				98	02	1022.5	25.6	22.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MEN NREQ 1515 WED. TO 0655 THURS.	

19 70 · FROM — TO — OR AT ROOSEVELT ROADS PUERTO RICO

REMARKS	Initials of the Officer of the Watch
0120 - SHORE PATROL RETURNED ONBOARD	
0620 - SUNRISE	
0700 HANDS EMPLOYED PAINTING SHIP	
0750 AB BERTHELETTE BROUGHT ONBOARD BY ARMED FORCES POLICE 0800 COLOURS - DIVERS DOWN HANDS EMPLOYED AT PAINTING SHIP	SK
0830 DIVERS ONBOARD 0850 LS SALCHERT RETURNED ONBOARD BY A.F.P.	
1200 SECURE	
1300 HANDS EMPLOYED PAINTING SHIP	
1449 PO BARRIE RETURNED ONBOARD	
1750 SHORE PATROL LANDED: 4 MEN.	
1820 ROUNDS CORRECT TP 1834 SUNSET	
1901 EXERCISED FIRE STATIONS #2 PUMP ROOM 1910 COMMENCED FUELLING - SMOKING RESTRICTIONS PIPED 1915 TWO DE'S FROM SEA HULL NUMBERS D-33 D-342 23	
2030 CPL INEWARD BROUGHT ONBOARD BY A.F.P.	
2120 FUELLING COMPLETED - SMOKING RESTRICTIONS LIFTED	
2300 TWO SHORE PATROL RETURNED	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ′	° ′		0635	26′ 0″	26′ 5″	12 HOURS
1200	° ′	° ′					
2000	° ′	° ′					

HMCS PROTECTEUR **THURS DAY** 2nd **OF** APRIL

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										02	060	10				98	02	1021.5	25	21.7	
0500																					
0600																					
0700																					
0800										7	060	10				98	02	1025	26.7	22.8	
0900																					
1000																					
1100																					
1200	+4									4	060	10				98	02	1023	31.7	29.4	
1300																					
1400																					
1500																					
1600										6	070	10				98	02	1021.5	28.9	23.9	
1700																					
1800																					
1900																					
2000										6	070	15				98	02	1022	26.7	23.3	
2100																					
2200																					
2300																					
2400										6	070	10				98	02	1023	26.1	22.8	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MEN NRFD 1515 THURS TO 0655 FRI	

19 70 FROM TO OR AT Roosevelt Roads Puerto Rico

REMARKS	Initials of the Officer of the Watch
0110 2 MEMBERS OF SHORE PATROL RETURNED ONBOARD	
0304 DISTURBANCE IN S4 MESS BETWEEN AS BLAIR AND AB PERRIE. PERRIE SUSTAINED CUT HAND — TAKEN TO SICK BAY FOR TREATMENT	
0610 DE 33 TO SEA 0623 SUNRISE 0625 DE 23 TO SEA 0700 HANDS EMPLOYED PAINTING SHIP	
0800 COLOURS	
1733 - SHORE PATROL LANDED - 4 MEN	
1834 - ~~ROUNDS~~ NRR SUNSET	
1905 - ROUNDS CORRECT WCR	
2335 - 2 MEN FROM SHORE PATROL RETURNED ONBOARD.	

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

APR 2 1970

COMMANDING OFFICER

HMCS PROTECTEUR

HMCS PROTECTEUR FRIDAY 3rd OF APRIL

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										6	070	5				98	02	1021	26.2	22.2	
0500																					
0600																					
0700																					
0800										5	060	5				98	03	1023	26.7	23.9	
0900																					
1000																					
1100																					
1200	+4									1	065	7				98	02	1023	35.0	29.5	
1300																					
1400																					
1500																					
1600										1	065	7				98	02	1022.5	34	30.1	
1700																					
1800																					
1900																					
2000										0	060	7				98	02	1022	25.6	21.7	
2100																					
2200																					
2300																					
2400										1	050	20				98	02	1023	25	21.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MEN - NRFD 1515 FRI. TO 0655 SAT.	

ROOSEVELT ROADS

1970 FROM TO , OR AT PUERTO RICO

REMARKS	Initials of the Officer of the Watch
0623. SUNRISE	
0700 - HANDS EMPLOYED PAINTING SHIP	
0800 COLOURS	TJRR.
0820 COMMENCED EMBARKING FUEL	
1512 USS LUSENO SECURED AT JETTY END.	
1630 USS LUSENO TO SEA	
1710 USS DENEBOLA TO SEA	
1715 COMPLETED FUELLING	
1729 SHORE PATROL LANDED	
1836 SUNSET	
1935 EXERCISED EMERGENCY PARTY 'FIRE AFT STB. QTR.'	
1955 REMISS CORRECT CBO	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ′	° ′					
1200	° ′	° ′		0730	25'-6"	26' 11"	12 HOURS
2000	° ′	° ′					

HMCS PROTECTEUR SATURDAY 4 **OF** APRIL

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										7	065	10				98	02	1021	25.6	22.2	
0500																					
0600																					
0700																					
0800										2	070	6				98	02	1022	27.2	21.7	
0900																		---	-		
1000																					
1100																					
1200	(4)									2	080	10				98	02	1023	31.1	24.4	
1300																					
1400																					
1500																					
1600										2	080	5				98	02	1021	29.4	23.9	
1700																					
1800																					
1900																					
2000										1	080	5				98	02	1021	26.1	21.7	
2100																					
2200																					
2300																					
2400										1	080	5				98	02	1022	26.1	22.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MEN NREQ FROM 1200 SATURDAY TO 0825 SUNDAY	

19 70 **FROM** **TO** ROOSEVELT ROADS **, OR AT** PUERTO RICO

REMARKS	Initials of the Officer of the Watch
0200 SHORE PATROL RETURNED ONBOARD - 3 MEN	
0310 REMAINDER OF SHORE PATROL RETURNED ON BOARD - 1 MAN	
0625 SUNRISE 0700 HANDS EMPLOYED PAINTING SHIP	ARP
0800 COLOURS	
1200 SECURE	
1300 LIBO'S AWAY ON EXCURSION	
1730 SHORE PATROL LANDED	
1830 LIBOS RETURNED 1837 SUNSET	
1930 ROUNDS CORRECT 2000 EXERCISED FIRE STATIONS AFTER LOS CONTROL ROOM	

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

HMCS PROTECTEUR SUNDAY 5th OF Apr. 1

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										2	080	12				98	02	1020·5	25·6	21·7	
0500																					
0600																					
0700																					
0800										1	070	10				98	02	1021·5	27·2	22·2	
0900																					
1000																					
1100																					
1200	+4									4	075	10				98	03	1022	28·9	26·7	
1300																					
1400																					
1500																					
1600										2	070	10				98	02	1019	29·4	27·7	
1700																					
1800																					
1900																					
2000										2	050	5				98	01	1020	26·1	22·8	
2100																					
2200																					
2300																					
2400										2	075	7				98	02	1020·5	25·0	21·1	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	SHIP'S COMPANY NRFD 1000- 0655 MON	

19 70 **FROM** **TO** , **OR AT** ROOSEVELT ROADS PUERTO RICO

REMARKS	Initials of the Officer of the Watch
0120 2 MEN OFFSHORE PATROL RETURNED	
0230 REMAINDER OF SHORE PATROL ABOARD	
0645 SUNRISE	
0800 COLOURS - HANDS EMPLOYED PAINTING SHIP	JW
0917 DIVERS DOWN - CLEANING BARGE	
1000 SECURE	
1057 DIVING COMPLETE	
1515 US SUBMARINE 670 BERTHED AHEAD	
1745 PTBN DRAKE LANDED ROOSEVELT ROADS HOSPITAL FOR OBSERVATION	
1850 SHORE PATROL LANDED 1836 SUNSET 1858 ELECTRICAL FIRE IN STBD CARGO DOOR HEATER	
1900 FIRE OUT, OVERHAULED & SENTRY POSTED 1930 PTBN DRAKE RETURNED ONBOARD 1953 ROUNDS CORRECT	MK

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

HMCS PROTECTEUR

MON **DAY** 6th **OF** APRIL

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: Direction (True)	Wind: Speed (Knots)	Sea Height (In Feet)	Swell: Direction From (True)	Swell: Height (In Feet)	Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius): Dry Bulb	Temperature (Celsius): Wet Bulb	Temperature (Celsius): Sea
0100																					
0200																					
0300																					
0400										0	CALM					98	01	1019	25.6	22.8	
0500																					
0600																					
0700																					
0800										1	070	4				98	01	1019	22.2	21.7	
0900		0440.60	8.6	31	VAR	VAR	VAR	VAR	9°W												
0919 1000		0449.20	13.4	49.5	VAR ~~215~~	VAR ~~215~~	VAR ~~225~~	VAR 1°W	9°W												
1057 1100		0462.59	20.3	71.7	064	064	073	0°	9°W												
1130 1200	+4	0482.82	19.6	96.5	064 005	064 005	073 013	0° 1°E	9°W	0	150	12	1	130	4	98	02	1016.5	27.8	22.8	27.8
1300		0502.45	19.6	97.7	005	005	013	1°E	9°W												
1400		0521.75	19.3	96.9	005	005	013	1°E	9°W												
1500		0541.30	19.6	98.4	005	005	013	1°E	9°W												
1600	+4	0561.22	19.9	98.7	005	005	013	1°E	9°W	1	125	20	1	140	3	98	02	1015	25.6	23.3	26.7
1700		0580.48	19.3 ~~19.6~~	98.6	005°	005°	014°	0°	9°W												
1800	+4	0601.00	20.5	99	005°	005°	014°	0°	9°W	4	127	20	1	120	4	98	02	1015	25	22.2	26.7
1900		0620.47	17.5	99	005°	005°	014°	0°	9°W												
2000	+4	0641.08	17.5	99	005°	005°	014	0°	9°W		130	19	1	120	3	98	02	1016	25.0	22.2	26.7
2100		0661.18	19.6	99	005°	005°	014	0°	9°W												
2200		0680.12	19.6	99	005°	005°	014	1°E	10°W												
2300		0698.74	18.6	99	005°	005°	014	1°E	10°W												
2400	(+4)	0719.27	19.0	99	005°	005°	014	1°E	10°W	3	135	18	1	130	3	98	03	1016.5	25.6	22.2	26.1

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

1970 ... FROM ROOSEVELT ROADS TO HALIFAX , OR AT

REMARKS			Initials of the Officer of the Watch
0105 SHORE PATROL RETURNED ON BOARD			
0600 USS LUSEND (670) TO SEA			
0614 SUNRISE			
0700 HANDS EMPLOYED BY DEPARTMENTS AND SECURING FOR SEA			
0800 COLOURS			MJK
0830 - SSD CLOSE UP Assume Condition Y 0859 - Commenced Using Bow Thruster	0900 - Astern Engine SP 10		
0902 - SP 5 0906 - Ahead Engine SP 10 0918 - A/C 135 0929 - A/C 090	0941 - A/C 126 0951 - A/C 076	0931 F/X VIS { Cabras Lt 356 Perro Pt 021 Transit Lt 313	
1030 SP 17 1057 g/c 064° (T) 1100 SP 19		1030 FIX VIS { Breakwater 237 Pta Este 109 K Cayo Lobo 016 Pta Mulas 190	
1130 g/c 005°(T)		1136 Fix Vis { Cockroach Is 034 Culebrita Lt 303 Sail Rk 071	
1235 SWITCHED TO BRIDGE CONTROL		1225 Fix Vis { → Cockroach Is 142 → Sajana Is 162 Sail. Rk 170	
1330 FOR EXERCISE HANDS TO EMERGENCY STATIONS 1336 SHIP IN CONDITION Zulu Charlie			
1428 SECURE EMERGENCY STATIONS REVERT TO NBCD CONDITION Yankee Charlie		1430 LORAN FIX { 19°09'N 65°08'W	
1600 HANDS TO LIFERAFT STATIONS		1530 LORAN FIX { 19°25'N 65°13'W	mfm
1636 SECURE LIFERAFT STATIONS		1635 LORAN FIX { 19°45'N 65°05'W	
1710 EXERCISED STRG. GEAR BREAKDOWN		1745 LORAN FIX { 20°06.5'N 65°00'W	NKR
1835 SUNSET NAVIGATION LTS SWITCHED ON		1900 FIX OBS. Pos { 20°31'N 65°00'W	MD
2055 LIFEBUOY ALARM TESTED			
2205 EXERCISED STEERING GEAR BREAKDOWN		2230 LORAN FIX { 21°51'N 65°00'W	
		2330 LORAN FIX { 22°07'N 65°02'W	BK

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ′	° ′					
1200	18° 23.5′ N	65° 09.0′ W	Visual Fix	0800	30′ 6″	31′ 3″	
2000	20° 49.0′ N	65° 00.0′ W	OBS Pos & DR				

HMCS PROTECTEUR — TUESDAY — 7TH OF APRIL

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		0739.17	19.1	99	005	005	014	1°E	10°W												
0200		0758.61	19.1	99	005	005	014	1°E	10°W												
0300		0778.78	19.1	98.9	005	005	014	1°E	10°W												
0400	+4	0799.55	20.2	99	005	005	014	1°E	10°W	6	150	14	1	140	9	98	02	1018	25.6	22.2	25.6
0500		0819.60	20.1	99	005°	005°	015°	1°E	11°W												
0600		0838.30	18.7	98.9	005°	005°	015°	1°E	11°W												
0700		0861.40	18.7	98.8	005°	005°	015°	1°E	11°W												
0800	+4	0880.40	19.0	98.9	005°	005°	015°	1°E	11°W	3	190	17	2	170	3	98	02	1018	32.8	26.7	25.6
0900		0898.78	19.0	98.8	005°	005	015	1°E	11°W												
1000		0919.40	19.0	98.8	005	005	015	1°E	11W												
1100		0935.31	15.0	74.1	005	005	015	1E	11W												
1200	+4	0955.27	19.0	98.7	005	005	015	1E	11W	7	215	25	2	190	4	98	01	1016	29.4	23.3	25.6
1300		0975.18	19.9	98.6	003	003	014	1E	12W												
1400		0995.41	20.3	98.8	003	003	014	1E	12W												
1500		1014.94	9.5	99	003	003	014	1E	12W												
1600	+4	1036.57	21.4	99	003	003	014	1E	12W	8	220	30	2	200	4	98	02	1012.3	26.1	23.8	24.4
1700		1042.94	6.3	54.8	Var	var	var	VAR	12W												
1800	+4	1060.92	18.0	97.1	003	003	014	1°E	12W	8	220	22	2	220	5	98	02	1013	26	23.5	23.9
1900		1080.21	17.0	97.8	003	003	015	1E	13W												
2000	+4	1100.70	17.0	98.7	003	003	015	1E	13W	8	260	26	2	220	8	97	18	1016	21.7	20.5	
2100		1120.60	19.1	98.9	003	003	015	1°E	13°W												
2200		1140.09	19.1	98.7	003	003	015	1°E	13°W												
2220					003	003	015	1°E	13°W												
2300		1159.81	19.1	98.6	004	004	015	2°E	13°W												
2400	+4	1179.20	19.4	98.7	004	004	015	2°E	13°W	8	265	28	2	220	5	97	02	1011	20.6	18.9	23.8

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

1970 FROM ROOSEVELT ROADS TO HALIFAX , OR AT

REMARKS		Initials of the Officer of the Watch
0125 LORAN FIX {3H7-2812, 342-9241, 343-1388}	22°40'N 64°50'W	
0300 LORAN FIX {3H7-2378, 345-5232, 343-1941}	23°13'N 64°45'W	
0405 LORAN FIX	23°22'N 64°33'W	
0530 OBS POS	23°56'N 64°31'W	
0604 - SUNRISE, NAV Lights SWITCHED OFF		
0702 - EXERCISED STEERING GEAR BREAKDOWN		
0730 - HANDS TO DIVISIONS	0730 LORAN FIX 24°27'N 64°26'W	
	0800 FIX LORAN 24°35'N 64°33'W	
0940 TRANSFERING FUEL FROM CARGO TANKS FWD TO DOUBLE BOTTOM TANK IN ENGINE ROOM		
1005 SP 6 1013 STOP MAIN ENGINES 1017 SP 4 1018 LOWERED SONAR DOME	1022 SP 10 1029 SP 19	
1110 EXERCISED STRG BREAKDOWN 1150 COMPLETED TRANSFERRING FUEL		
1300 LORAN 3L3 1864 FIX 342 3920	26°13'N 69°23'W	
1330 EXERCISED EMERGENCY STATIONS		
1438 SECURED EMERGENCY STATIONS 1500 EXERCISED STEERING GEAR BREAKDOWN 1505 EXERCISED GYRO FAILURE	1430 LORAN 3L2 3355 FIX 3L3 1926	26°36'N 64°20'W
	1540 LORAN FIX	27°04'N 64°16'W
1610 EXERCISED MAN OVERBOARD		
1628 FIRE ALARM BOW THRUSTER COMPT MANDS TO EMERGENCY STATIONS 1646 SECURE EMERGENCY STATIONS 1650 COMPLETED MAN OVERBOARD EXERCISE		
1704 GAS TURBINE SHUT DOWN 1705 SP 19 1730 COMPLETED TRANSFERING DIESEL FUEL - 40 TNS FROM SHIPS CARGO TO SHIPS READY USE TANKS	1750 EXERCISED STRG GEAR BREAKDOWN	1710 LORAN FIX 27°13'N 64°17'W
1835 TESTED LIFEBUOY ALARM SUNSET NAVLIGHTS SWITCHED ON 1855 COMMENCED STRIPPING FUEL TANK	1830 FIX LORAN	27° 47'N 64° 07'W
1920 EXERCISED STRG GEAR BREAKDOWN	1930 FIX LORAN	27°58'N 64°10'W
2040 - COMPLETED STRIPPING FUEL TANKS	2013 FIX LORAN	28°16'N 63°57.5'W
	2100 FIX LORAN	28°41'N 63°57.5'W
2220 - A/C 004°T	2205 FIX LORAN	28°49'N 64°01'W
	2310 FIX LORAN	29°10'N 63°59'W

Position	Latitude	Longitude	Depending on	Draught Time	Draught Forward	Draught Aft	Notice for Main Engines at Noon
0800	24° 45' N	64° 28' W	DR FROM 0530 OBS POS				
1200	25° 55' N	64° 22' W	DR FROM 1221 OBS POS				
2000	28° 07' N	64° 11' W	DR FROM 1930 LORAN FIX				

HMCS PROTECTEUR WEDNESDAY 8th OF April

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		1198.72	19.6	98.7	004	004	015	2°E	13°W												
0200		1218.19	19.5	98.7	004	004	015	2°E	13°W												
0300		1236.94	19.6	98.6	004	004	015	2°E	13°W												
0400	(+4)	1256.79	19.8	98.6	004	004	015	2°E	13°W	2	275	42	6	300	15	98	01	1010	17.8	14.4	23.3
0500		1274.41	19.0	98.7	004	004	015	2°E	13W												
0600		1291.93	19.0	98.9	004	004	015	2E	13W												
0632					004	004	015	2E													
0700		1310.77	16.0	59.7	235	~~252~~ 235 mk	252	4W	13W												
0720					235	235		4W													
0800	+4	1322.46	11.7	92.9	240	240	257	4W	13W	5	310	42	5	290	20	98	03	1012	17	15	20.0
0801					250	250	266	3W	13W												
0830					180	180	196	3W	13W												
0900		1338.28	15.8	92.9	180	180	196	3W	13W												
1000		1358.87	20.6	87.5	VAR	VAR	VAR	VAR	13W												
1100		1373.44	14.6	91.2	VAR	VAR	VAR	VAR	13°W												
1200	+4	1386.50	13.1	55.1	VAR	VAR	VAR	VAR	13°W	7	328	23	5	320	30 ~~20~~	97	02	1019	22.2	16.1	20.0
1300		1393.28	5.7	47.3	VAR	VAR	VAR	VAR	13°W												
1400		1399.66	6.4	32.9	VAR	VAR	VAR	VAR	13°W												
1408					003	003	017	1°W	13°W												
1500		1411.80	12.2	75.1	003	003	017	1°W	13°W												
1600	+4	1426.72	15.0	86.1	003	003	017	1°W	13°W	5	310	23	4	330	30	97	01	1018	18.3	12.2	21.1
1700		1441.70	15.0	86.0	003	003	016	1E	14W												
1800	+4	1457.48	15.7	88.2	003	003	016	1E	14W	5	315	21	5	350	25	98	03	1019.5	18.3	12.8	20.0
1900		1472.08	14.6	88.2	003°	003°	016°	1°E	14°W												
2000	+4	1487.90	15.9	89	003°	003°	016°	1°E	14°W	6	308	22	5	350	25	97	02	1019	18.3	12.8	20.0
2100		1496.82	15.0	81.3	003°	003°	016°	1°E	14°W												
2200		1514.75	15.0	80.2	003°	003°	016°	1°E	14°W												
2300		1528.90	14.2	84.3	003°	003°	016°	1°E	14°W												
2400	+4	1543.85	14.9	89.5	003°	003	016°	1°E	14°W	6	300	18	2	330	20	97	02	1020	18.3	12.8	20.0

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
367.9mi		

1970 FROM Roosevelt Roads TO Halifax , OR AT

REMARKS		Initials of the Officer of the Watch
	2400 LORAN Fix { 29°22'N 64°00'W	
	0100 LORAN Fix { 29°39'N 63°57'W	
	0200 LORAN Fix { 29°58'N 63°56'W	
	0300 LORAN Fix { 30°13'N 63 55'W	
	0400 Fix LORAN { 30° 31'N 63 50'W	
0556 SUNRISE NAV LIGHTS SWITCHED ~~OFF~~ MK	0500 Fix LORAN { 30° 53'N 63° 50'W	
0628 SP 8 0632 A/C 235 SP 15 0635 SP 18	0600 Fix LORAN { 31° 09'N 63° 49'W	
0720 A/C 240°	0700 Fix LORAN { 31° 10'N MK 63° 48'W	
0801 A/C 250 0830 A/C 180°		
0905 SP 12 A/C 150 0947 SECURED EMERGENCY FLYING STATIONS REVERTED TO NBCD YC 0925 SP 18 A/C 137 0930 EXERCISE - HANDS TO EMERGENCY FLYING STATIONS, STBD RESCUE WATCH, ASSUMED NBCD "2B"	0905 Fix LORAN { 30°46'N 64°10'W	
1005 A/C 170° ~~HOT ABD~~ 1022 A/C 170° 1045 A/C 150	1040 Fix LORAN { 30°20.5'N 64°02'W	
1107 A/C 145 1120 A/C 128 1131 SP 8 1115 A/C 140 1122 SP 12 1132 SP 6 1118 A/C 120 1123 A/C 145 1135 RENDEZVOUS WITH SKANDERBORG 1130 A/C 165 1145 SP 12 A/C 240	1110 Fix LORAN { 30°13.5'N 63°51'W	
1200 A/C 140 1230 A/C 110 SP 6 1205 A/C 050 1215 A/C 105 1218 SP 7	1220 Fix LORAN { 30°11'N 63°46'W	TRR
1308 A/C 140 1342 HANDS TO EMERGENCY STATIONS ASSUME CONDITION 2C 1309 SP 9 1346 SPEED 5 1312 SP 6 1356 A/C 000 SP 15 DEPARTED HV SKANDERSBORG 1331 HANDS TO FLYING STATIONS 1400 SP 10 1336 A/C 120	1400 LORAN Fix { 30°00'N 63°37'W	
1405 SP 12 1430 SP 17 1408 Co 002 1431 SECURED FLYING STATIONS 1417 SP 14 1423 SP 16 1425 SECURED EMERGENCY STATIONS REVERT TO CONDITION YC	1500 LORAN Fix { 30° 14'N 63° 37'W	
1604 HANDS TO EMERGENCY FLYING STNS 1608 ASSUME CONDITION ZULU BRAVO 1618 SECURED EMERGENCY FLYING STNS REVERT TO CONDITION YC	1600 Fix LORAN { 30° 28'N 63° 36'W	
1716 SP 18 1728 SP 17	1700 Fix LORAN { 30° 46'N 63° 35'W	
1838 SUNSET NAV LIGHTS SWITCHED ON	1805 Fix LORAN { 30°57'N 63°35'W	
1925 SP 16	1905 Fix LORAN { 31°17'N 63°36'W	
2025 COMMENCED DUMPING FPS	2000 LORAN Fix { 31°28'N 63°33'W	
2135 COMPLETED DUMPING FPS	2100 LORAN Fix { 31°44'N 63°29'W	
2221 SP 17 2258 SP 16	2200 LORAN Fix { 31°56'N 63°31'W	
2330 SP 18	2300 LORAN Fix { 32°10'N 63°32'W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	31°08.7'N	64°13.6'W	LORAN				
1200	30°06'N	63°46'W	LORAN				
2000	31°28'N	63°33'W	LORAN				

HMCS PROTECTEUR — THURSDAY — 9th OF APRIL

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		1559.00	15.15	86.1	003	003	~~316°~~ 016	1°E	14W												
0200		1574.00	15	85.9	003	003	~~316~~ 016	1°E	14W												
0300		1588.36	16.36	85.6	003	003	~~316~~ 016	1°E	14W												
0400	+4	1602.04	15.0	85.9	003	003	~~316~~ 016	1°E	14W	7	268	26	2	320	20	98	02	1018	15.6	12.8	17.9
0500		1618.14	15.0	85.9	003	003	019	0	16°W												
0600		1635.30	17.2	91.6	003	003	019	0	16°W												
0700		1653.24	17.9	96.4	003	003	019	0	16°W												
0800	+4	1670.08	16.0	90.9	003	003	019	0	16°W	7	265	26	2	320	20	98	02	1018	17.2	13.9	
0849					003	003	019	2E									--	-			
0855					~~025MK~~ 025	~~025MK~~ 025	043	0													
0900		1687.31	15.8	90.4	003	003	019	2E	18W												
1000		1705.80	17.5	98.5	003	003	019	2E	18W												
1100		1724.81	17.5	99.7	003	003	019	2E	18W												
1200	+4	1743.99	17.5	99.9	003	003	019	2E	18W	6	255	30	6	040	15	98	03	1018.5	20.0	16.1	18.3
1220					002	002	018	2°E	18W												
1300		1763.44	19.5	100.1	002	002	018	2°E	18W												
1345					020	020	035	3°E	18W												
1349					002	002	018	2°E	18W												
1400		1783.68	20.2	100.2	002	002	~~018~~	2°E	18W												
1500		1800.42	16.8	100.2	002	002	018	2°E	18W												
1600	+4	1821.50	21.1	100.3	002	002	019	1°E	18W	8	254	31	3	250	10	98	02	1011	17.8	15.6	17.8
1700		1839.46	18.0	92.2	002	002	019	1°E	18°W												
1800	+4	1856.36	16.8	88.7	002	002	019	1°E	18W	3	245	33	2	230	12	98	01	1010	17.8	16.1	15.6
1835					002	002	019	1°E													
1900		1873.64	16.8	86.4	358	358	013	2°E	18W												
2000	+4	1886.74	13.1	61.1	358	358	013	2°E	18W	3	245	27	2	320	10	98	02	1013	18.3	16.7	16.7
2100		1896.71	10.0	61.1	358°	358°	018°	~~2°E~~ 1°E	18°W												
2200		1912.47	15.7	85.5	358°	358°	018°	~~2°E~~ 1°E	~~18°W~~ 19°W												
2300		1929.58	17.1	89.2	358°	358°	016	1°E	19°W												
2400	+4	1947.60	18.0	92.4	358	358	016	1°E	19°W	8	240	~~29~~ 35	4	300	15	98	02	1013	17.2	14.6	18.9

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
398.9MI		

1970 FROM ROOSEVELT ROADS TO HALIFAX , OR AT

REMARKS		Initials of the Officer of the Watch
0005 - SP 17	0010 LORAN FIX { 32°32'N 63°28'W	
	0115 LORAN FIX { 32°46'N 63°28'W	–
	0230 LORAN FIX { 33°08'N 68°26'W	
	0325 LORAN FIX { 33°20'N 68°21'W	
	0400 LORAN FIX { 33°35'N 63°20'W	
0551 SUNRISE NAV LIGHTS SWITCHED OFF	0500 LORAN FIX { 33°45'N 63°20'W	
	0700 LORAN FIX { 34°19'N 63°16'W	
	0800 LORAN FIX { 34°36'N 63°11'W	
0820 SP 18.5 0840 SP 10 0849 A/C 025 0850 SP 15 0850 ANCHOR CABLES SECURED WITH BLOCK & TACKLE 0855 C/C 003 SP 18.5		
0918 SP 19.5 0932 FOR EXERCISE HANDS TO EMERGENCY STNS ASSUME CONDITION ~~HAPPY~~ ZULU BRAVO	0900 LORAN FIX { 34° 51'N 63° 12'W	
1105 SECURE EMERGENCY STNS REVERT TO CONDITION YANKEE CHARLIE	1100 LORAN FIX { 35° 24'N 63° 14'W	
1220 A/C 002°	1200 LORAN FIX { 35° 46'N 63° 19'W	
1332 EXERCISED HANDS TO EMERGENCY STATIONS ASSUMED CONDITION "ZC" 1342 ASSUMED CONDITION "ZB" 1345 A/C 020° 1349 A/C 002° 1446 EXERCISED - SHIP CLEAR OF FALLOUT	1300 LORAN FIX { 36°07.5'N 63°19.0'W	
1405 ASSUMED CONDITION "ZA" 1424 EXERCISED ACTIVATION PREVENTING 1432 EXERCISED ENTERING FALLOUT - ON RESPIRATORS 1435 PERSONNEL IN CITADEL OFF RESPIRATORS 1505 REVERTED TO EMERGENCY STATIONS 1509 REVERTED TO CONDITION Z 1512 SECURE EMERGENCY STATIONS REVERTED TO CONDITION X	1500 LORAN FIX { 36°44'N 63°13W 1600 COMMENCED RADIO TRIALS WITH HMCS SHERBROOKE/HMAN	
1630 SP 17 1637 SP 12 1641 SP 17	1600 LORAN FIX { 37°0'N 63°07W	
	1700 LORAN FIX { 37°14'N 63°07'W	
1835 A/C 358° 1858 SP 12 SUNSET NAV LIGHTS SWITCHED ON	1800 LORAN FIX { 37° 32'N 62° 59'W	
	1900 LORAN FIX { 37° 48'N 62° 58'W	
	2000 FIX LORAN { 38°01'N 63°00'W	
2100 SP 17	2100 FIX LORAN { 38°26'N 63°02W	
2235 SP 18	2200 FIX LORAN { 38°25'N 63°02'W	
	2300 FIX LORAN { 38°44'N 63°01'W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	34° 36 N	63° 11' W	LORAN FIX				
1200	35° 46' N	63° 19' W	LORAN FIX				
2000	38° 01' N	63° 00' W	LORAN FIX				

HMCS PROTECTEUR
COMMANDING OFFICER
APR 9 1970

HMCS PROTECTEUR FRI DAY 10th OF Apr. 1

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
0015					002	002	020	1°E	19°W												
0100		1966.08	18.4	92.5	002	002	020	1°E	19°W												
0115					000	000	018	1°E	19°W												
0200		1986.95	19.5	92.5	000	000	019	1°E	20°W												
0300		2003.91	18.5	93.3	000	000	019	1°E	20°W												
0400	+4	2023.03	18	92.2	000	000	019	1°E	20°W	8	240	24	2	300	10	97	02	1003	17.2	14.4	15.6
0500		2039.90	16.87	80	000	000	019	1°E	20°W												
0600		2056.14	16.2	78.3	000	000	019	1°E	20°W												
0625					000	000	019	1°E	20°W												
0635					090	090	109	1°E	20°W												
0700		2068.54	12.4	65.4	000	000	019	1°E	20°W												
0800	+4	2080.46	11.9	53.1	000	000	019	1°E	20°W	8	235	18	2	230	4	97	02	999	10.0	8.3	5.0
0900		2093.36	12.9	60.8	000	000	019	2°E	21W												
1000		2106.29	12.9	60.7	000	000	019	2E	21W												
1100		2119.02	12.8	60.6	000	000	019	2E	21W												
1136					000	000	019	2E	21W												
1200	+4	2131.97	12.9	60.8	350	350	010	1E	21W	8	235	12	½	220	4	91	28	997.5	11.1	8.9	5.0
1300		2144.91	13.0	60.8	000°	000°	021°	1°E	22°W												
1400		2157.60	12.7	60.8	000°	000°	021°	1°E	22°W												
1500		2170.31	12.7	57.6	000°	000°	021°	1°E	22°W												
1600	+4	2180.95	10.6	49.2	000°	000	021°	1°E	22°W	8	260	7	½	040	4	91	45	997	13.5	12.3	4.4
1700		2191.50	10.6	49.5	000	000	021°	1°E	22°W												
1800	+4	2203.00	11.5	52.3	000	000	021°	1°E	22°W	8	150	6	½	030	4	97	43	996	9.4	7.8	4.4
1900		2216.40	12.5	60.8	000	000	021	1E	22W												
2000	+4	2228.20	11.8	60.8	000	000	021	1E	22W	8	110	13	½	030	4	97	44	996	5.0	4.4	3.3
2047					180°	180°	205°		22°W												
2100		2240.83	12.6	55.2	180°	180°	205°	3°W	22°W												
2200		2252.32	11.5	59.6	VAR	VAR	VAR	VAR	22°W												
2300		2263.01	11.0	60.2	VAR	VAR	VAR	VAR	22°W												
2400	+4	2274.61	11.6	60.2	VAR	VAR	VAR	VAR	22°W	8	078	8	½	030	4	97	02	995	3.3	2.2	2.2

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
324.4mi		

1970 FROM ROOSEVELT ROADS TO HALIFAX , OR AT

REMARKS		Initials of the Officer of the Watch
	0045 LORAN FIX 39°17'N 63°00'W	
	0115 LORAN FIX 39°26'N 63°00'W	
	0200 LORAN FIX 39°36'N 63°00.5W	
	0300 LORAN FIX 39 56N 62 59W	
0410 - A/C 359°T	0440 LORAN FIX 40°12'N 62°55'W	
0541 - SUNRISE. 0550 - COMPLETED FILTERING JPS.	0559 - HELO SAGUENAY ON RADAR 340°T 15 MILES 0559 - SP 15 0520 LORAN FIX 40°32.5'N 62°56'W	
0625 - Ak 090 SP 10 0635 - A/C 000° 0700. SAGUENAY STM. STBD STAMO DISTANCE	0635 LORAN FIX 40°52'N 62°53'W	
0730 - HANDS TO RAS STATIONS	0737 ASSUME CONDITION 'YANKEE' 0741 SP 12 0746 SAGUENAY BEGINNING FINAL APPROACH 0730 LORAN FIX 41°N 62°52'W	
0805 - SAGUENAY ALONGSIDE 0807 - FIRST LINE TO SAGUENAY 0816 - SPAN WIRE TENSIONED	0800 LORAN FIX 41°07.6'N 62°52'W	
0918 - COMMENCED PUMPING DISTILATE 0955 - STOPPED PUMPING AMOUNT TRANSFERRED 1416 BBLS 0959 - SPAN WIRE DETENSIONED	0900 LORAN FIX. 41°18'N 62°51'W	
1001 - LAST LINE LET GO 1010 - SAGUENAY BEGINNING FINAL APPROACH 1016 - FIRST LINE TO SAGUENAY 1023 - SPAN WIRE TENSIONED	1015 LORAN FIX 41°34'N 62°52'W	
1127 - SPAN WIRE DETENSIONED 1131 - LAST LINE LET GO 1133 - SECURE RAS STATIONS	1145 - COMMENCED SOUNDING FOG SIGNALS 1200 FIX (DECCA) 41°55'N 62°50'W	
1246 - HANDS TO REPLENISHMENT STATIONS	1250 FIX DECCA 42°05'N 62°52'W	
1300 - SWITCHED ON NAVIGATION LIGHTS A/C 000° 1320 - ROMEO AT DIP 1344 - SAGUENAY ALONGSIDE 1346 - FIRST LINE TO SAGUENAY 1436 - SPAN WIRE DETENSIONED 1442 - LAST LINE LET GO 1443 - SECURE RAS STATIONS	1352 - SPAN WIRE TENSIONED 1448 SP 10 1330 FIX DECCA 42°12'N 62°52'W 1435 FIX DECCA 42°26'N 62°53'W	
	1500 FIX DECCA 42°31.5'N 62°53'W	NRL
1618 STOP BOOMING FOG SIGNALS 1640 NAVLIGHTS OFF	1600 FIX DECCA 42°42'N 62°53.5'W	
1730 HANDS TO RAS STATIONS 1744 SP 12	1700 DECCA FIX 42 51N 62 52W	
1805 - SASKATCHEWAN ALONGSIDE 1803 - FIRST LINE TO SASKATCHEWAN 1809 - SPAN WIRE TENSIONED 1844 DARKENED SHIP 1850 SUNSET RAS LTS SWITCHED ON	1856 - SPAN WIRE DETENSIONED 1900 - LAST LINE LET GO 1830 DECCA FIX 43°12'N 62° 53'W	
1941 - SASKATCHEWAN ALONGSIDE 1951 - FIRST LINE TO SASKATCHEWAN	1935 DECCA FIX 43° 20'N 62° 54'W	
2007 - SPAN WIRE TENSIONED 2038 - SPAN WIRE DETENSIONED 2043 - LASTLINE LET GO 2046 - SECURE RAS STATIONS 2104 SP 12 SONAR DOME HOUSED 2135 COMMENCED UHF TRIALS WITH SASKATCHEWAN COURSES AND SPEEDS VARIOUS	2046 - REVERT TO CONDITION X 2047 - A/C 180 SP 6 COMMENCED RAISING SONAR DOME 2 2005 DECCA FIX 43°56.7N 62°52.7W 2122 DECCA FIX 43°32' 62° 51.6' 2230 FIX DECCA 43°29.5' 62° 51.7 2345 FIX, DECCA 43°31.3 62° 51.5'	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	41°07.6N	62°52'W	LORAN				
1200	41°55'N	62°50'W	DECCA				
2000	43°26.4N	62°53.2W	DECCA				

HMCS PROTECTEUR SATURDAY 11th OF APRIL

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		2284.29	9.7	53.9	VAR	VAR	VAR	VAR	22°W												
0200		2294.36	10.1	48.7	176	176	201	3°W	22°W												
0300		2304.99	10.63	48.7	176	176	201	3°W	22°W												
0400	+4	2314.31	10.3	48.9	308	308	328	2°E	22°W	8	348	11	1	070	6	97	02	995	3.2	1.7	3.3
0500		2325.59	10.5	52.3	308	308	328	2°E	22°W												
0600		2338.65	13.1	61.7	308	308	328	2°E	22°W												
0655					270	270	291	1°E	22°W												
0700		2348.39	10.0	42.3	270	270	291	1°E	22°W												
0710					008	008	029	1°E	22°W												
0800	+4	2358.36	9.7	48.5	008	008	029	1°E	22°W	8	285	16	1	020	6	97	72	994	3.3	2.2	2.8
0814					008	008	029	2E	23W												
0900		2371.85	13.5	66.6	325	325	361	3W	23°W												
1000		2384.80	11.9	60.6	325	325	361	3W	23°W												
1011					325	325	361	3W	23W												
1048					320	320	346	3W	23W												
1100		2397.04	9.8	58.8	020	020	042	1E	23W												
1120					020	020	042	1E	23W												
1200	+4	2409.18	11.5	55.9	045	045	072	4W	23W	8	270	14	½	190	4	96	71	993.5	0.6	0.0	3.3
1300		2421.42	10.8	51.5	VAR	VAR	VAR	VAR	23W												
1400		2432.00	11.1	54.1	VAR	VAR	VAR	VAR	23W												
1500																					
1600										5	020	10	—	—	—	98	02	995.5	7.2	4.7	
1700																					
1800																					
1900																					
2000										7	020	10	—	—	—	98	02	1000	4.4	3.3	
2100																					
2200																					
2300																					
2400										8	020	10	—	—	—	98	02	1001	3.9	2.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
152.6 mi	PNRFD 1545 to 0755 MON.	

1970 FROM ROOSEVELT ROADS TO HALIFAX. , OR AT

REMARKS			Initials of the Officer of the Watch
0026 - A/C 176° SP. 10	0100	DECCA FIX { 43°25.7'N 62°51'W	
0140 - LIFEBUOY ALARM TESTED	0130	DECCA FIX { 43°21'N 62°48.5'W	
	0230	DECCA FIX { 43°11.6'N 62°48.9'W	
0300 - A/C 308	0323	DECCA FIX { 43°07.7'N 63°52.1'W	MS
0430 SP 12	0430 DECCA FIX { 43 13·8N 62 56·4W		
0538 SUNRISE NAV LIGHTS SWITCHED OFF 0600 SP 10	0530 DECCA FIX { 43 20·7N 63 15 W		
0630 HANDS TO FLYING STATIONS 0646 ASSUME CONDITION 'V' 0650 STAND DOWN FLYING STATION 0655 A/C 270	0630 DECCA FIX { 43 27·4N 63 26·0W		
0710 A/C 008 0720 HANDS TO RAS STATIONS 0750 HANDS TO FLYING STATIONS 0752 SECURE RAS STATIONS	0730 DECCA FIX { 43 32·6N 63 34·0W		
0814 - A/C 326 SP 15 0818 - A/C 340			
0845 - HANDS TO RAS STATIONS 0852 A/C 270 SP 12 0905 - SASKATCHEWAN ALONGSIDE 0906 - FIRST LINE TO SASKATCHEWAN 0915 - SPAN WIRE TENSIONED 0936 - COMMENCED PUMPING 0946 - STOPPED PUMPING 87 bbls DIESEL	0800 DECCA FIX { 43° 36.9'N 63° 32.5'W		
1007 - DETENSION SPAN WIRE 1009 - LAST LINE LET GO 1011 - A/C 325 SP 15 1048 - A/C 020 SP 12 1059 - SASKATCHEWAN ALONGSIDE	0930 DECCA FIX { 43° 54.6' N 63° 33.0' W		
1107 - FIRST LINE TO SASKATCHEWAN 1120 - A/C 046 1135 - TENSIONED SPAN WIRE 1140 - DETENSIONED SPAN WIRE 1148 - LAST LINE LET GO 1146 - SECURED RAS STATIONS 1156 - A/C 000°	1030 DECCA FIX { 44° 05.1'N 63° 32.5'W		
1240 A/C 338° 1252 350 CLOSED UP	1130 DECCA FIX { 44° 13.9'N 63° 32.4'W		
1302 SP 12 1303 BLIND PILOTAGE FROM CLOSE UP 1310 SSO AND CABLE PARTY CLOSE UP. 1312 A/C 340° 1314 A/C 339° 1315 CHEBUCTO HD. ↓ 1317 A/C 338° 1319 MCR CONTROL 1321 HANDS TO STATIONS FOR ENTERING HBR. 1322 A/C 339 1325 A/C 339 1329 A/C 345 1331 A/C 354 1334 A/C 338 1337 A/C 340 1342 A/C 339 1343 GYRO 1° LOW BY TRANSIT. 1344 SP 4 1346 A/C 339 1348 A/C 335 1352 A/C 005° 1356 SP 2 1357 PILOT ON BOARD	1230 FIX VISUAL ERROR { SOMARO ISL LT. - 300° 5.6 mi. CHEBUCTO HD LT. 339°		
1402 - A/C 315 1417 - STOP MAIN ENGINE 1418 - AHEAD ENGINE SP 3 1438 - FIRST LINE ASHORE 1445 - SECURED ALONGSIDE JETTY FOUR HMC DOCKYARD HALIFAX. CUSTOMS ABOARD	1329 FIX ERR { THRUMCAP 1.87 mi. MAUGHERS BCN 2.36 mi. TRIBUNE NO 1.1 mi.		
1545 - CUSTOMS CLEARED SHIP, DEPENDANTS ABOARD, GANGWAY OPEN.			
1855 - SUNSET			
1945 - ROUNDS CORRECT			
1950 - EXERCISED EMERGENCY AT FIRE STATIONS IN E.M. LOG COMPARTMENT.			

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	43° 36·9'N	63° 32·5'W	Decca				
1200	44° 18·4'N	63° 26·9 W	Decca				STEAMING
2000	° '	° '					

HMCS PROTECTEUR SUNDAY 12TH OF APRIL

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	010	10	—	—	—	98	02	1002	2·2	2·1	
0500																					
0600																					
0700																					
0800										8	020	15	—	—	—	98	02	1004	2·2	3·3	
0900																					
1000																					
1100																					
1200	+4									8	020	15				97	02	1007.5	5.6	8.3	
1300																					
1400																					
1500																					
1600										7	020	15				98	01	1010.5	6.7	4.4	
1700																					
1800																					
1900																					
2000										8	020	15				98	02	1010.5	7.8	5.0	
2100																					
2200																					
2300																					
2400										8	020	15				98	02	1010.5	5.0	4.4	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	SHIP'S COMPANY NRFD 0930 SUN – 0755 MON	

19 70 FROM [redacted] TO [redacted], OR AT HALIFAX, N.S.

REMARKS	Initials of the Officer of the Watch
0534 - SUNRISE	
0800 - COLOURS	
0855 - HANDS EMPLOYED CLEANING SHIP	
0930 - SECURE	
1740 SKEENA FROM SEA TO JETTY 6	
1854 SUNSET U/D LIGHTING S/W ON.	
1950 ROUNDS CORRECT	
2001 EXERCISED FIRE & EMERGENCY PARTY - BATTERY CHARGING ROOM.	

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

HMCS PROTECTEUR MONDAY 13TH OF APRIL

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								~~2E~~	~~3W~~ 03	2	030	10				98	02	1014.5	4.4	2.2	
0500																					
0600																					
0700																					
0800										7	090	8				98	03	1016	3.3	3.9	
0900																					
1000																					
1100																					
1200	+4									4	090	12				98	01	1016	3.6	1.7	
1300																					
1400																					
1500																					
1600										7	040	8				98	02	1027	11.1	7.8	
1700																					
1800																					
1900																					
2000										8	040	5				98	02	1020	3.9	1.7	
2100																					
2200																					
2300																					
2400										1	020	5				98	02	1020.5	1.7	0.6	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	SHIPS COMPANY NRFD 1600 MONDAY TO 0755 TUESDAY	

19 70 FROM — TO — , OR AT HALIFAX, N.S.

REMARKS	Initials of the Officer of the Watch
0537 SUNRISE - UPPER DECK LIGHTING S/W OFF	
0800 COLOURS - HANDS EMPLOYED CLEANING SHIP	SHR
0855 - DIVERS IN WATER	
1015 - DIVERS OUT OF WATER	
1854 - SUNSET U/D LIGHTING SWITCHED ON	
1980 - EXERCISED FIRE STATIONS IN TILLER FLATS 1940 - ROUNDS CORRECT	

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

HMCS PROTECTEUR TUESDAY 14th **OF** APRIL

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										0	040	4				98	01	1022	0.0	-1.7	
0500																					
0600																					
0700																					
0800										0	030	5				98	02	1022	1.1	-1.1	
0900																					
1000																					
1100																					
1200	+4									1	000	2				98	02	1022	8.9	3.9	
1300																					
1400																					
1500																					
1600										1	345	10				98	02	1021	8.9	4.4	
1700																					
1800																					
1900																					
2000										1	000	4				98	02	1022.5	3.3	1.7	
2100																					
2200																					
2300																					
2400										1	000	2				98	02	1022	3.3	1.1	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	N.R.F.D FROM 1600 TUESDAY TO 0755 WEDNESDAY	

19 70 FROM TO OR AT HALIFAX

REMARKS	Initials of the Officer of the Watch
0537 - SUNRISE U/D NIGHTING SWITCHED OFF	
0800 - COLOURS: HANDS EMPLOYED AT CLEARING STATIONS	
0900 - HANDS EMPLOYED PORT SHIP AND MAINTENANCE	
0941 - HANDS TO FLYING STATIONS 0955 - HELICOPTER ONBOARD	
1315 - HANDS EMPLOYED PORT SHIP AND MAINTENANCE	
1405 - CHIGNECTO AND BUOY TO SEA	
SECURE	
1745 - SKEENA FROM SEA TO JETTY SIX	
1825 - EXERCISED FIRE STATIONS IN AFTER T.A.S. PA ROOM BST - SUNSET	
1945 ROUNDS CORRECT	

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

HMCS PROTECTEUR WEDNESDAY 15TH OF APRIL

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										1	000	4				98	02	1022	1.7	.6	
0500																					
0600																					
0700																					
0800										8	000	3				97	07	1023	1.7	1.1	
0900																					
1000																					
1100																					
1200	+4									1	110	2				98	02	1023	8.9	7.2	
1300																					
1400																					
1500																					
1600										1	CALM					98	02	1022.5	11.1	7.2	
1700																					
1800																					
1900																					
2000										2	150	6				97	02	1024	4.4	3.3	
2100																					
2200																					
2300																					
2400										8	CALM					96	28	1026	1.1	1.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MEN NRFD FROM 1600 WEDNESDAY TO 0755 THURSDAY	

19 70 FROM TO , OR AT HALIFAX N.S.

REMARKS	Initials of the Officer of the Watch
0532- SUNRISE	
0800- COLOURS - HANDS EMPLOYED AT CLEANING STATIONS	
1600- DUTY WATCH TURNED TO - TOUCH UP PAINTING	
1700- DUTY WATCH SECURED	
1800- DUTY WATCH EMPLOYED TOUCH UP PAINTING	
1845- DUTY WATCH SECURED 1858- SUNSET	
1930- ROUNDS CORRECT 1931- EXERCISED FIRE STATIONS IN THE MAIN GALLEY	
2326- GUARD OFFICER CHALLENGED AND DEPARTED	

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

HMCS PROTECTEUR THURSDAY 16th OF APRIL

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	150	5				96	42	1026	1.7	1.1	
0500																					
0600																					
0700																					
0800										8	CALM					96	42	1227.5	0.6	0.0	
0900																					
1000																					
1100																					
1200	+4									3	120	6				98	01	1028.5	6.7	6.1	
1300																					
1400																					
1500																					
1600										4	185	5				98	02	1028	6.6	3.9	
1700																					
1800																					
1900																					
2000										8	130	6				96	02	1029	2.2	1.7	
2100																					
2200																					
2300																					
2400										8	180	5				96	02	1031	.6	.0	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MEN NRFD 1600 THURSDAY TO 0755 FRIDAY	

19 70 **FROM** **TO** , **OR AT** HALIFAX, N.S.

REMARKS	Initials of the Officer of the Watch
0532 - SUNRISE	
0800 - COLOURS HANDS EMPLOYED AT CLEANING STATIONS	
1005 FIVE MEN POSTED ONBOARD FROM PRESERVER 1010 WHEELER BARGE SECURED ALONGSIDE	
1200 SECURE	
1315 HANDS EMPLOYED BY DEPARTMENTS	
1430 SMOKING RESTRICTIONS IN EFFECT. STRIPPING TANKS	
1600 SECURE	
1715 SMOKING RESTRICTIONS LIFTED	
1858 SUNSET	
2000 ROUNDS CORRECT 2000 EXERCISED FIRE STATIONS. SPIRIT ROOM	

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

SCS PROTECTEUR
APR 16 1970
COMMANDING OFFICER

HMCS PROTECTEUR FRIDAY 17th OF APRIL

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	120	5				96	42	1031	1.1	.0	
0500																					
0600																					
0700																					
0800										8	130	5				97	01	1031	.0	.0	
0900																					
1000																					
1100																					
1200	(+4)									4	130	5				98	02	1031.5	3.3	2.2	
1300																					
1400																					
1500																					
1600										3	180	8				98	02	1029	5.6	3.9	
1700																					
1800																					
1900																					
2000										3	180	6				98	02	1028	3.3	2.8	
2100																					
2200																					
2300																					
2400										5	190	5				98	02	1027	3.9	3.3	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	MCN NREO FROM 1600 FRIDAY TO 0755 ~~SATURDAY~~ SUNDAY	

19 70 **FROM** **TO** , **OR AT** HALIFAX, NS

REMARKS	Initials of the Officer of the Watch
0532 SUNRISE	
0800 COLOURS. HANDS EMPLOYED AT CLEANING STATIONS	
1320 GANGWAY REMOVED	
1350 GANGWAY REPLACED	
1345 COMMENCED TRANSFERRING FUEL	
1410 ABBN SMITH REMOVED TO CELLS	
1803 COMPLETED TRANSFERRING FUEL	
1904 SUNSET	
1930 ROUNDS CORRECT	
2030 FIRE STATIONS EXERCISED - EMR	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon	
				Time	Forward	Aft		
0800	° ′	° ′						
1200	° ′	° ′		0645	29'5"	30'11"	12 Hours	
2000	° ′	° ′						

HMCS PROTECTEUR SATUR **DAY** 18th **OF** April

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	CA	LM				98	02	1024.5	3.9	2.8	
0500																					
0600																					
0700																					
0800	+4									8.	180	5				97	02	1022.5	4.4	3.9	
0900																					
1000																					
1100																					
1200	+4									6	195	10	-	-	-	98	01	1021	3.9	4.4	
1300																					
1400																					
1500																					
1600										7	205	12	-	-	-	98	03	1018	3.9	3.3	
1700																					
1800																					
1900																					
2000										5	240	14	-	-	-	97	01	1017	3.9	3.1	
2100																					
2200																					
2300																					
2400										6	275	16	-	-	-	97	03	1017	3.9	3.8	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	SHIP'S COMPANY WRFD 0930-1200 SUN	

19 70 **FROM** **TO** , **OR AT** HALIFX

REMARKS	Initials of the Officer of the Watch
0527 SUNRISE	
0800 COLOURS. DUTY WATCH EMPLOYED AT CLEANING STATIONS 0815 ABBN SMITH RETURNED BY MA'S	
0930 - SECURE	
1615 - EXERCISED FIRE PARTY IN MAIN FRIDGE MACHINERY SPACE	
1901 - SUNSET 1940 - ROUNDS CORRECT SR	

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

HMCS PROTECTEUR SUNDAY 19th OF APRIL

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										6	280	15	-	-	-	97	03	1009	4.4	2.2	
0500																					
0600																					
0700																					
0800										7	280	15	-	-	-	98	03	1008	3.9	3.9	
0900																					
1000																					
1100																					
1200	+4									8	280	15	-	-	-	98	03	1006	3.9	3.7	
1300																					
1354 1400		2440.01			VAR VAR	VAR VAR	VAR VAR	VAR VAR	23W												
1500		2450.70	9.3	52.4	VAR	VAR	VAR	VAR	23W												
1507 1542 1600	+4	2464.94	14.2	69.4	158 114 180	158 114 180	182 137 205	1W 0 2W	23W	8	320	34	5	340	2	97	20	1000.5	5.0	3.9	2.2
1608 1700		2477.59	12.6	58.9	115 115	115 115	139 139	1°W	23°W 23°W												
1800	+4	2491.40	13.9	58.9	115	115	139	1°W	23°W	8	320	30	2	350	5	98	02	999.5	3.9	2.8	2.2
1900		2502.36	10.9	56.3	115°	115°	139	1°W	23°W												
2000	+4	2515.37	13.0	57.7	115	115	139	1°W	23°W	8	330	30	1	320	5	98	02	999	1.1	0.6	3.9
2100		2526.75	11.4	57.7	115°	115°	139°	1°W	23°W												
2200		2538.79	12	57.8	115°	115°	139°	1°W	23°W												
2300		2550.39	12	57.9	115°	115°	139°	1°W	23°W												
2330 2400	+4	2568.30	15	73	115° 130	115° 130°	139° 155°	1°W 2°W	23°W 23°W	8	355	35	5	310 NR ~~355~~	15	98	02	999	.6	0	3.3

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

1970 **FROM** HALIFAX **TO** , **OR AT** SEA

REMARKS	Initials of the Officer of the Watch
0527 - SUN RISE	
0800 - COLOURS	
0830 - DUTY WATCH EMPLOYED AT CLEANING STATIONS	
0930 - SECURE	
1330 - SSD AND CABLE PARTY CLOSE UP ASSUME NBCD COND Y	
1340 - TUGS GLENDYNE AND RIVERTON ON STBD QUARTER	
1354 - LAST LINE LET GO	
1409 - SLIPPED TUGS CO 13 SP 8	
1414 - A/C 126	
1422 - A/C 170	
1426 - A/C 151	
1430 - SP 10	
1432 - INNER MIDDLE GROUND BUOY STBD BEAM	
1445 - A/C 175	
1447 - MARS ROCK BUOY ON STBD BEAM	
1463 - A/C 155	
1506 - SECURE SSD	
1426 U/S { BREAKWATER - 163½ GEORGE IS LT - 139¾ FLAME TOWER - 105	
1510 U/S FIX { DEVIL'S IS 013 SAMBRO IS 221 CHEBUCTO HD 288	
1608 A/C 115	
1600 DECCA FIX { 44 23·1 N 63 19 W	
1725 ASSUMED POSITION OF OTC	
1758 HANDS TO EMERGENCY FLYING STATIONS	
1730 DECCA FIX { 44 13·8 N 63 00·2 W	
1812 SECURE EMERGENCY FLYING STATIONS	
1813 SP 5	
1816 SP 12	
1805 FIX DECCA { 44°10'N 62°50.6'W	
1904 SUNSET NAV. LTS S/W ON. Darken ship.	
1950. Saguenay landed on helicopter.	
2000 FIX DECCA { 44°00'N 62°24'W	
2030 DECCA FIX { 43°57'N 62°14'W	
2130 DECCA FIX { 43°52'N 62°02'W	
2258 - NIPIGON ASSUMED DUTIES OF OTC.	
2230 DECCA FIX { 43°46'N 61°47'W	
2330 - A/C 130°T SP-18	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° '	° '					
1200	° '	° '					
2000	44° 00' N	62° 24' W	DECCA				

HMCS PROTECTEUR MON DAY 20th OF APRIL

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		2583.08	15.6	87.1	130	130	153	0	23W												
0200		2600.40	17.5	87.9	130	130	153	0	23W												
0300		2618.51	17.0	88	130	130	153	0	23W												
0400	+4	2636.28	18.0	88	130	130	153	0	23W	8	315	34	5	350	10	98	02	998.5	3.3	2.8	7.2
0500		2654.24	18.0	88	130	130	153	0	23°W												
0600		2672.33	18.0	88.1	130	130	153	0	23W												
0700		2689.86	17.9	88.1	130	130	153	0	23W												
0800	+4	2706.02	16.2	88.3	130	130	153	0	23W	8	315	23	7	320	10	98	02	1001.4	2.0	1.5	5.6
0900		2726.84	14	88	130	130	153	0	23°W												
0917					125	125	148	0	23°W												
1000		2741.16	22	75.6	125	125	148	0	23°W												
1100		2756.07	16	71.6	125	125	148	0	23°W												
1200	+4	2770.99	11.5	71.6	125	125	148	0	23°W	8	315	32	5	320	10	98	02	1003	3.3	1.1	12.2
1214					125	125	148	0													
1245					135	135	160	2W													
1258					340	340	360	3E													
1300		2785.55	15.0	75.9	330	330	250	3E	23W												
1314					330	330	350	3E													
1400		2791.05	10.0	53.7	290	290	313	0	23W												
1409					130	130	155	2W													
1500		2803.35	16.0	69.6	130	130	155	2W	23W												
1600	+4	2819.56	16.2	71.8	130	130	155	2W	23W	8	325	30	5	320	10	97	80	1003	5.0	4.4	13.3
1700		2830.96	11.4	73.4	VAR	VAR	VAR	VAR	23°W												
1800	L4	2846.78	16.0	79.6	130	130	154	1°W	23°W	8	310	20	5	320	10	98	02	1007	5.6	5.0	14.4
1900		2859.21	12.5	66.8	VAR	VAR	VAR	VAR	23°W												
2000	+4	2867.63	8.4	45.4	160	160	187	4°W	23°W	8	310	30	5	320	10	97	02	1009.5	6.1	5.8	14.9
2100		2875.86	8.2	45.3	160	160	187	4°W	23°W												
2200		2883.69	7.8	45.3	160	160	187	4°W	23°W												
2300		2891.97	8.3	45.2	160	160	187	4°W	23°W												
2400	+4	2900.77	9.0	45.2	160	160	187	4°W	23°W	8	310	22	4	270	15	97	02	1012.5	5.6	6.1	14.4

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
340.5mi		

1970 FROM HALIFAX TO , OR AT SEA

REMARKS		Initials of the Officer of the Watch
	1230 LORAN FIX {43° 33'N 61° 23'W	
	0130 LORAN FIX {43° 22'N 61° 05'W	
	0230 LORAN FIX {43° 11'N 60° 50'W	
	0330 LORAN FIX {42° 57'N 60° 31'W	
0420 COMMENCED BLOWING SOOT & PUMPING BILGES	0430 LORAN FIX {42° 43'N 60° 11'W	
0511 SUNRISE NAVLIGHTS SWITCHED OFF 0515 COMPLETED PUMPING BILGES 0520 COMPLETED BLOWING SOOT	0530 LORAN FIX {42° 32'N 59° 52'W	
	0630 LORAN FIX {~~42°10'N~~ 42°22'N 59°36'W	
0800 - HANDS EMPLOYED AT CLEANING STATIONS	0730 LORAN FIX {42° 10'N 59° 18'W	
0818 COURSES REQUIRED TO FIND BEST COURSE FOR UNREP 0825 CO. 130° 0900 HANDS TO RAS STATIONS 0914 A/C 120° SP 15 0917 A/C 125° 0940 FIRST LINE TO SAGUENAY 0943 FIRST LINE TO NIPIGON	0900 FIX LORAN {42°00'N 58°55'W 1000 FIX LORAN {41° 44'N 58° 34'W	
1110 STOPPED PUMPING OVER BOD LEAKHOLE OF HOSE NO KURL PASSED 1146 LOST ALL LINES SAGUENAY 1200 RECOVERED LAST LINE FROM ~~NIPIGON~~	1100 FIX LORAN {41° 35'N 58° 16'W 1200 FIX LORAN {41° 29'N 58° 03'W	
1204 SECURE ICAS STATIONS 1258 a/c 330 1213 a/c 135 SP 18 1245 a/c 340 SP 10 1246 HANDS TO FLYING STNS	1230 LORAN FIX {41° 23'N 57° 55'W	
1304 HELO ON DECK 1314 a/c 290 SP 12 1315 HANDS TO RAS STNS 1318 SP 13 1320 SECURE FLYING STNS 1321 SP 12 1325 SP 5 1335 SP 12 1348 SP 10 1400 SP 12		
1405 SECURE RAS STNS 1409 a/c 130 SP 15	1415 LORAN FIX {41° 25'N 58° 01'W	
1600 HANDS TO FLYING STATIONS	1515 LORAN FIX {41° 13'N 57° 44'W	
1605 COURSE & SPEED AS REQUIRED FOR HELO OPS 1624 SECURE FLYING STATIONS 1635 HANDS TO FLYING STATIONS 1652 SECURE FLYING STATIONS 1614 a/c 320 1617 SP 10 1622 a/c 130 SP 15 1627 SP 19 1640 a/c 330 SP 10 1648 a/c 130 SP 19	1605 LORAN FIX {41° 06'N 57° 32'W	
1720 SP 15 1800 HANDS TO FLYING STATIONS	1700 LORAN FIX {41° 04'N 57° 24'W	
1823 SAGUENAY GUIDE 1824 A/C 340 1827 SP 10 1828 A/C 330 1829 A/C 325 1830 LAUNCHED HELO 1831 A/C 130 1832 SECURE FLYING STATIONS - SUNSET NAV LTS S/W ON 1845 A/C 160 SP 10 SP 18 SUNSET NAV LIGHTS SWITCHED ON	1800 FIX LORAN {40°49.5'N 57°02.5'W	
	1900 FIX LORAN {40°45'N 56°55'W	
	2000 LORAN FIX {40° 33'N 56° 49'W	
	2105 LORAN FIX {40° 22'N 56° 47'W	
	2250 LORAN FIX {40° 08'N 56° 37'W	
	2330 LORAN FIX {40° 02.5'N 56° 36'W	

Position	Latitude	Longitude	Depending on	Draught Time	Draught Forward	Draught Aft	Notice for Main Engines at Noon
0800	42° 06.1'N	59° 11.5'W	LORAN				
1200	41° 29'N	58° 03'W	LORAN				
2000	40° 33'N	56° 49'W	LORAN				

HMCS PROTECTEUR TUESDAY 21st OF APRIL

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 Direction (True)	Wind Speed (Knots)	Sea Height (In Feet)	Swell Direction From (True)	Swell Height (In Feet)	Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius) Dry Bulb	Wet Bulb	Sea
0100		2907.92	9.5	45.2	160	160	187	5W	22W												
0200		2917.06	10.0	45.2	160	160	187	5W	22W												
0300		2924.61	10.0	45.2	160	160	187	5W	22W												
0348					160	160	187	5W													
0400	+4	2932.90	10.0	45.5	278	278	302	2°W	22W	8	315	21	5	320	8	98	02	1012	8.5	5.4	14.4
0500		2940.92	9.0	54.7	278	278	302	2°W	22°W												
0557					278	278	302	2°W													
0600		2951.06	9.1	51.7	272	272	296	2°W	22°W												
0700		2962.37	10.3	63.4	272	272	296	2°W	22°W												
0710					272	272	296	2°W													
0800	+4	2970.42	9.1	50.4	320	320	344	2°W	22°W	8	320	18	3	320	9	98	02	1017	10.6	10.0	14.4
0900		2980.82	10.4	59.1	320	320	344	2°W	22°W												
1000		2990.02	9.2	59.7	320	320	344	2°W	22°W												
1100		3002.22	12.2	59.8	320	320	344	2°W	22°W												
1200	+4	3013.42	12.0	61.7	320	320	344	2°W	22°W	8	095	9	1	010	8	98	02	1015	7.8	7.2	
1200					320	320	344	2W													
1300		3032.04	14.0	94.8	086	086	110	2W	22W												
1312					086	086	110	2W													
1400		3050.24	17.0	95.2	080	080	104	2W	22W												
1455					080	080	104	2W													
1500		3068.54	14.0	95.1	108	108	130	0	22W												
1518					108	108	130	0													
1527					120	120	145	3W													
1600	+4	3084.51	14.0	80.7	140	140	165	3W	22W	8	172	14	2	000	8	98	02	1013	9.4	8.3	14.4
1700		3096.12	11.5	57.7	140	140	165	3°W	22°W												
1705					345	345	004	1°E													
1720					005	005	025	2°E													
1800	+4	3111.31	15.1	80.6	005	005	025	2°E	22°W	8	084	18	2	000	8	98	02	1012	9.4	8.9	14.4
1836					053	053	075	0	22°W												
1900		3126.01	14.7	76.7	053	053	075	0	22°W												
1905					030	030	051	1°E	22W												
1912					040	040	060	2°E	22W												
2000	+4	3139.39	13.4	69.2	040	040	060	2°E	22W	8	080	18	2	000	8	98	02	1014	8.9	8.3	15.0
2100		3156.50	16.2	85.1	VAR	VAR	VAR	VAR	22W												
2156					000	000	024	2W													
2200		3167.25	10.7	56.2	350	350	014	2W	22W												
2300		3176.88	8.8	45.6	VAR	VAR	VAR	VAR	22W												
2400	+4	3185.44	8.6	45.5	270	270	292	0	22W	8	045	24	2	000	8	98	02	1017	8.9	7.2	15.6

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

1970 FROM HALIFAX TO , OR AT SEA

REMARKS		Initials of the Officer of the Watch
	0030 LORAN FIX { 39° 58'N / 56° 33'W }	
	0130 LORAN FIX { 39° 47'N / 56° 29'W }	
	0230 LORAN FIX { 39° 41'N / 56° 28'W }	
0348 a/c 278	0330 LORAN FIX { 39° 28'N / 56° 20'W }	
0415 SP 12	0430 LORAN FIX { 39° 27'N / 56° 23'W }	
0502 SUNRISE UDL SWITCHED OVER 0515 Sp 13 0555 a/c 272	0600 LORAN FIX { 39° 31'N / 56° 45'W }	
	0640 LORAN FIX { 39° 31'N / 56° 56'W }	
0710 a/c 320 0716 Sp 8 0740 HANDS TO RAS STATIONS 0746 Sp 12	0800 LORAN FIX { 39° 42'N / 57° 15'W }	
0819 PASSED FIRST LINE TO BARRY (933) 0848 PASSED FIRST LINE TO INGRAHAM (694)	0845 LORAN FIX { 39° 42'N / 57° 15'W }	
1021 SLIPPED LAST LINE FROM INGRAHAM (694) DELIVERED 1300 BBLS 1043 - SLIPPED LAST LINE USS BARRY DELIVERED 1280 BBLS 1041 PASSED FIRST LINE TO ROAN (853)	1030 FIX LORAN { 40°00'N / 57°35'W }	
1158 SLIPPED LAST LINE USS ROAN (853) TRANSFERRED 1150 BBLS 1159 Sp 19 SECURED RAS STNS	1130 FIX LORAN { 40°05'N / 57°45'W }	
1200 - A/C 086°T	1225 LORAN FIX { 40°15'N / 57°35'W }	
1312 - A/C 080°T	1330 LORAN FIX { 40°11'N / 57°12'W }	
1455 a/c 108	1423 LORAN FIX { 40°13'N / 56°48'W }	
1518 a/c 120 — — . 1535 Sp 12 1527 a/c 140 1529 HANDS TO RAS STNS 1559 - SAGUENAY ALONGSIDE	1530 LORAN FIX { 40°16'N / 56°35'W }	
1610 - FIRST LINE PASSED 1620 - COMMENCED PUMPING 1650 - STOPPED PUMPING 1658 - LAST LINE LET GO 1705 SECURE RAS STATIONS a/c 345 Sp 15 1720 a/c 005 Sp 18	1600 LORAN FIX { 40°06'N / 56°20'W }	
	1730 LORAN FIX { 39°57'N / 56°08'W }	
1828 SUNSET - NAV LTS S/W ON 1836 - A/C 052 Sp 10 1900 HANDS TO RAS STATIONS	1825 FIX LORAN { 40°26'N / 56°30'W }	
1905 A/C 030 1924 FIRST LINE TO ANNAPOLIS 2000 SECURE RAS STATIONS 1912 a/c 040 1925 S/W ON TASK LTS S/W OFF TASK LTS. Sp 14 1959 - SLIPPED LAST LINE ANNAPOLIS - TRANSFERRED 805 BBLS	2000 FIX LORAN { 40°32'N / 55°54'W }	
2000 a/c 350 Sp 18 2056 a/c 040 Sp 12 2027 a/c 325 2040 a/c 000 2045 HANDS TO RAS STNS 2055 - NIPIGON ALONGSIDE		
2147 SECURE RAS STNS 2100 - FIRST LINE PASSED 2140 - LAST LINE LET GO 2150 Sp 10 2110 - COMMENCED PUMPING 2156 a/c 350 2130 - STOPPED PUMPING		
2209 a/c 310 2220 a/c 290 2225 a/c 270°(T)	2240 FIX LORAN { 41° 15'N / 56° 12'W }	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	39° 42' N	57° 15' W	LORAN FIX				
1200	40° 16' N	57° 60' W	LORAN FIX.				
2000	40° 32' N	55° 54' W	LORAN FIX.				

HMCS PROTECTEUR WEDNESDAY 22nd OF APRIL

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		3199.04	8.6	45.5	270	270	292	1°E	23°W												
0200		3203.01	9.0	45.5	270	270	292	1°E	23°W												
0300		3212.84	9.8	45.4	270	270	292	1°E	23°W												
0400	+4	3222.48	9.6	45.3	270	270	292	1°E	23°W	8	000	9	1	340	8	98	02	1018.5	5.6	3.9	13.9
0500		3232.02	9.6	45.2	180	180	207	4°W	23°W												
0600		3241.40	9.6	45.2	180	180	207	4°W	23°W												
0700		3251.02	9.6	45.2	090	090	115	2°W	23°W												
0800	+4	3260 23	9.0	45.2	090	090	115	2°W	23°W	7	000	12	1	010	5	98	02	1019	10.6	9.4	14.4
0820					030	030	052		23°W												
0900		3274.48	14.2	70.1	030	030	052	1°E	23°W												
1000		2391.91	17.5	85.7	030	030	052	1°E	23°W												
1100		3309.65	17.7	86.6	065	065	086	2°E	23°W												
1200	+4	3321.96	12.3	62.6	VAR	VAR	VAR	VAR	23°W	7	130	9	1	015	5	98	02	1019	11.7	10.6	14.4
1258					000	000	023	0													
1300		3335.00	13.1	64.7	090	090	115	2W	23W												
1336					090	090	115	2W													
1357					~~180~~	180	~~295~~	2W													
1400		3347.80	12.0	64.7	000	000	023	0	23W												
1500		3360.29	14.0	64.7	000	000	023	0	23W												
1600	+4	3370.98	10.7	54.7	VAR	VAR	VAR	VAR	23W	5	080	21	2	240	5	98	01	1016	6.1	5.0	13.3
1611																					
1700		3380.97	10.0	50.5	VAR	VAR	VAR	VAR	23°W												
1800	+4	3392.56	12.4	57.9	030	030	055	2W	23°W	5	105	22	2	020	4	98	02	1016	6.1	4.9	13.3
1805					030	030	055	2°W	23°W												
1900		3400.57	8.0	37.2	270	270	292°	1°E	23°W												
2000	+4	3407.84	7.3	35.4	270	270	292°	1°E	23°W	7	090	25	4	020	5	97	02	1016	7.2	6.7	13.3
2100		3415.73	7.9	34.9	270°	270°	292°	2°E	24°W												
2200		3423.65	8.1	34.5	270°	270°	292°	2°E	24°W												
2300		3431.42	7.8	34.6	270°	270°	292°	2°E	24°W												
2400	+4	3439.96	8.0	34.6	270°	270°	292°	2°E	24°W	7	070	22	2	090	4	98	02	1012	7.2	6.1	12.2

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
255.8		

19 70 **FROM** HALIFAX **TO** , **OR AT** SEA

REMARKS		Initials of the Officer of the Watch
	0017 LORAN FIX { 41° 02'N 56° 16'W	
	0100 LORAN FIX { 41° 01'N 56° 25'W	
	0205 LORAN FIX { 41° 02'N 56° 37'W	
0400 A/C 180	0300 LORAN FIX { 41° 01'N 56° 47'W	
0430 COMMENCED BLOWING SOOT 0457 SUNRISE HOL SWITCHED OFF	0400 LORAN FIX { 41° 04'N 57° 02'W	
0600 A/C 090	0600 LORAN FIX { 40° 38'N 56° 55'W	
0620 COMPLETED BLOWING SOOT	0700 LORAN FIX { 40 39 N 56° 45W	
	0800 LORAN FIX { 40° 40'N 56° 35'W	
0820 A/C 030 SP 18	0830 FIX LORAN { 40° 44'N 56° 32'W	
0953 HANDS TO FLYING STATIONS	0930 FIX LORAN { 41° 00'N 56° 24'W	
1005 A/C 075 1056 SP 14 1008 SECURE FLYING STATIONS 1020 HELO ONDECK 1045 HANDS TO FLYING STATIONS 1100 A/C 065 SP 12	1035 FIX LORAN { 41° 08.5'N 56° 00 W	
1104 SP 13 1119 SECURE FLYING STATIONS 1105 A/C 110 A/C 050 1107 A/C 140 1139 A/C 000°	1135 FIX LORAN { 41° 15'N 55° 47.5 W	
1230 - HANDS TO FLYING STNS 1258 - A/C 090	1240 LORAN FIX { 41° 26'N 55° 46'W	
1335 SECURE FLYING STNS 1336 A/C 180 1357 A/C 000	1320 LORAN FIX { 41° 25'N 55° 35'W	
1451 SP 11 1500 HANDS TO FLYING STNS 1503 A/C 065 1522 A/C 000 1545 A/C 075	1430 LORAN FIX { 41° 22'N 55° 28'W 1520 LORAN FIX { 41° 34'N 55° 30'W	
1610 SECURE FLYING STATIONS 1645 HANDS TO RAS STATIONS 1611 A/C 240 SP 11 1643 A/C 030 SP 12 1650 - SAGUNAY ALONGSIDE 1655 - FIRST LINE PASSED 1710 - COMMENCED PUMPING 1735 - SECURE PUMPING 1755 - LAST LINE LET GO 1805 - SECURE RAS STATIONS A/C 270 SP 10 1811 - SP 7 1833 - SUNSET NAV LIGHTS SWITCHED ON	1600 LORAN FIX { 41° 38'N 55° 24'W 1700 LORAN FIX { 41° 40'N 55° 20 W 1800 LORAN FIX { 41° 50'N 55° 14'W 1900 LORAN FIX { 41° 52'N 55° 24'W	
	2000 FIX LORAN { 41° 52'N 55° 34'W	
2148 - TESTED LIFEBOAT ALARM	2100 FIX LORAN { 41° 52'N 55° 41.5'W	
	2200 FIX LORAN { 41° 52'N 55° 54'W	
	2300 FIX LORAN 41° 55'N 55° 54'W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	40° 40' N	56° 35' W	LORAN				
1200	41° 17' N	55° 47' W	LORAN				
2000	41° 52' N	55° 34' W	LORAN				

HMCS PROTECTEUR THURSDAY 23rd OF APRIL

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 Direction (True)	Wind Speed (Knots)	Sea Height (In Feet)	Swell Direction From (True)	Swell Height (In Feet)	Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius) Dry Bulb	Wet Bulb	Sea
0000					270	270	292	2E													
0100		3445.61	10.0	48.2	000	000			24W												
0155					270	270	295	1W													
0200		3455.39	10.0	49.3	180	180	205	1W	24W												
0300		3463.65	10.0	49.4	180	180	205	1W	24W												
0305					180	180	205	1W													
0400	+4	3470.82	10.0	49.5	090	090	112	2E	24W	8	045	35	5	070	10	97	40	1014	6.5	5.6	12.2
0401					040	090	112	2E	24W												
0500		3475.70	5.0	49.2	000	000	022	2°E	24W												
0530					000	000	022	2°E	24W												
0600		3482.34	6.5	49.3	270	270	292	2°E													
0655					180	180	208	4°W													
0700		3490.10	7.7	48.9	155	155	178	1°E	24W												
0742					155	155	178	1°E													
0800	+4	3498.58	8.4	59.6	160	160	183	1°E	24W	8	044	34	7	030	15	97	40	1015.5	7.8	6.7	12.2
0900		3506.90	8.1	59.5	160	160	183	1°E	24W												
0912					150	150	175	1°W	24W												
1000		3515.60	8.7	59.7	150	150	175	1°W	24°W												
1100		3523.70	8.1	59.8	VAR	VAR	VAR	VAR	24°W												
1200	+4	3533.10	9.4	59.7	VAR	VAR	VAR	VAR	24°W	8	055	40	6	055	15	97	42	1009.5	7.8	6.7	11.1
1300		3543.90	13.5	67.8	VAR	VAR	VAR	VAR	23°W												
1309					180	180	205	2W													
1340					220	220	244	1W													
1400		3555.03	12.2	59.4	180	180	205	2W	23°W												
1420					180	180	205	2W													
1500		3565.45	10.8	51.7	270	270	293	0	23°W												
1515					270	270	293	0													
1600	+4	3579.96	14.4	76.3	258	258	282	1W	23°W	8	030	34	5	040	10	96	45	1016	8.9	8.3	15.0
1610					258	258	282	1W	23W												
1700		3596.12	16.1	84.9	270	270	293	0	23°W												
1800	+4	3612.02	16.0	85	270	270	293	0	23°W	8	040	38	6	030	12	96	40	1015	9.4	8.3	14.4
1900		3628.76	16.7	85	270	270	291	1°E	22W												
2000	+4	3644.84	16.1	84.9	270	270	291	1°E	22W	8	045	32	5	040	10	97	02	1018	8.3	7.2	13.3
2100		3661.32	16.5	84.7	270	270	291	1°E	22°W												
2200		3677.67	16.4	84.7	270	270	291	1°E	22°W												
2230					267	267	289	0°	22°W												
2300		3693.99	16.3	84.7	267	267	289	0°	22°W												
2400	+4	3710.99	17.0	84.6	267	267	289	0°	22°W	8	020	32	4	050	10	98	02	1020	6.2	5.5	15.0

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

1970 FROM HALIFAX TO , OR AT SEA

REMARKS		Initials of the Officer of the Watch
0000- a/c 000° Sp 4 0004- Sp 10 0005- COMMENCED PUMPING BILGES		
0100 a/c 270° 0120 - COMPLETED PUMPING BILGES 0155 - a/c 180°	0110 LORAN FIX { 42° 02'N 56° 18'W	
0305 a/c 090°	0305 LORAN FIX { 41° 50'N 56° 19'W	
0405 COMMENCED BLOWING SOOT 0430 COMPLETED BLOWING SOOT 0454 SUNRISE NAV LIGHTS SWITCHED OFF		
0530 a/c 270 0600 a/c 180	0550 LORAN FIX { 42 03'N 56° 27'W	
0650 SN 12 0658 a/c 165	0645 LORAN FIX { 41 56 N 56 32 W	
0742 a/c 160	0730 LORAN FIX { 41° 49' N 56° 25' W	
	0800 LORAN FIX { 41° 41' N 55° 36' W	
0912 a/c 150 175° (M)		
1007 a/c 155° T 1040 a/c 065° 1045 a/c 155°	1000 LORAN FIX { 41° 22.5' N 56° 13' W	
1122 a/c 190 1158 a/c 240 1135 a/c 160 1154 a/c 235°	1110 LORAN FIX { 41° 12.5' N 56° 08' W	
1205 a/c 070 1208 a/c 080 1210 TWO BOILERS BACK ON LINE 1211 Sp 13 1217 a/c 190 1218 Sp 15 1221 a/c 180 1258 HANDS TO RATS STNS	1230 LORAN FIX { 41° 08'N 56° 09'W	
1309 a/c 220 1330 Sp 1335 SECURE RATS STNS 1340 a/c 180	1330 LORAN FIX { 40° 58'N 56° 18'W	
1407 Sp 12 1420 a/c 270 1435 Sp 15	1430 LORAN FIX { 40° 52'N 56° 28'W	
1511 Sp 10 1515 Sp 18 a/c 258 1538 Sp 17	1530 LORAN FIX { 40° 47'N 56° 37'W	
1710 a/c 270	1700 LORAN FIX { 40° 45'N 57° 09'W	
	1745 LORAN FIX { 40° 47'N 57° 29'W	
1838 SUNSET - NAV LTS S/W ON.	1800 LORAN FIX { 40° 45'N 57° 33'W	
	1900 LORAN FIX { 40° 46'N 57° 54'W	
2055 - LIFEBUOY ALARM TESTED	2000 LORAN FIX { 40° 43'N 58° 10'W	
	2100 LORAN FIX { 40° 46'N 58° 39'W	
	2200 LORAN FIX { 40° 47'N 58° 56'W	
	2300 LORAN FIX { 40° 47'N 59° 12'W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	41° 41' N	55° 36' W	LORAN				
1200	41° 04' N	56° 09' W	LORAN				
2000	40° 43' N	58° 10' W	LORAN				

SEP 23 1970

COMMANDING OFFICER

HMCS PROTECTEUR FRIDAY 24th OF APRIL

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 Direction (True)	Wind Speed (Knots)	Sea Height (In Feet)	Swell Direction From (True)	Swell Height (In Feet)	Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius) Dry Bulb	Temperature (Celsius) Wet Bulb	Temperature (Celsius) Sea
0100		3728.51	18.8	84.6	267	267	289	0	22W												
0200		3745.97	17.4	84.6	267	267	289	0	22W												
0300		3762.40	18.5	84.5	267	267	290	0	21W												
0400	+4	3780.54	17.9	84.1	267	267	290	0	21W	8	046	21	3	060	8	97	02	1023	8.9	8.4	16.7
0447					267	267	290	2°W													
0500		3796.86	17.0	75.6	264	264	287	2°W	21W												
0512					264	264	287	2°W													
0600		3813.10	12.0	66	260	260	282	1°W	21W												
0635					260	260	282	1°W													
0700		3822.24	9.0	62	045	045	067	1°W	20W												
0800	+4	3832.53	10.3	57.2	045	045	067	1°W	21W	8	001	13	3	045	8	98	02	1026.5	6.7	5.0	13.9
0900		3842.90	10.4	57.2	045	045	067	1W	21W												
0917					195	195	219	3													
1000		3859.00	16.1	84.7	195	195	219	3W	21W												
1100		3877.71	18.7	97.5	195	195	219	3°W	21W												
1200	+4	3896.95	18.9	97.5	195	195	219	3°W	21W	8	060	17	1	020	6	98	02	1026	8.9	6.7	13.3
1259					195	195	219	3 W													
1300		3915.80	18.8	96.8	050	050	071	0	21W												
1400		3926.20	11.9	57.3	050	050	071	0	21W												
1500		3937.62	11.9	57.7	050	050	071	0	21W												
1504					050	050	071	0													
1518					170	170	191	0													
1600	+4	3950.62	13.0	68.2	050	050	071	0	21W	8	112	12	2	050	6	98	02	1023	12.8	12.2	13.3
1647					050	050	071	0													
1700		3961.58	11.0	55.5	328	328	347	2°E	21°W												
1702					328	328	347	2°E	21°W												
1800	+4	3973.03	11.4	54.6	300	300	319	2°E	21W	8		1	1	030	6	98	02	1024	9.4	7.2	12.2
1900		3985.24	12.2	58.1	300°	300°	319°	2°E	21W												
2000	+4	3997.30	12.0	58.1	300°	300°	319°	2°E	21W	8	140	8	1	040	5	98	02	1023	7.8	6.7	14.0
2100		4007.92	11.0	58.0	300	300	319	2E	21W												
2200		4021.60	12.0	57.9	010	010	032	1W	21W												
2300		4033.99	14.0	59.9	010	010	032	1W	21W												
2400	+4	4044.83	13.0	60	010	010	032	1W	21W	3	150	17	1	050	5	98	01	1021	6.1	5.0	13.3

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
337.2mi		

1970 FROM HALIFAX TO , OR AT SEA

REMARKS		Initials of the Officer of the Watch
	0001 LORAN FIX 40° 43'N 59° 40'W	
	0100 LORAN FIX 40° 43'N 60° 00'W	
	0200 LORAN FIX 40° 43'N 60° 24'W	
	0300 LORAN FIX 40° 43'N 60° 48'W	
0415 Sp 15 0417 A/C 264	0400 LORAN FIX 40° 43'N 61° 07'W	
0510 COMMENCED BLOWING SOOT 0512 A/C 260 0515 SP 13 0517 SUNRISE LAND L SWITCHED OFF	0500 LORAN FIX 40° 41.5'N 61° 30'W	
0618 completed blowing Soot 0635 A/C 045 Sp 12 0630 HANDS TO RAS STATIONS 0632 SWITCH TO HAND CONTROL 0700 FIRST LINE ACROSS USS BARRY PORT SIDE 0708 Ingram alongside Starboard Side First line across 0759 stopped pumping USS Barry 1177 Bbls 0724 commenced pumping USS Barry 0731 commenced pumping USS Ingram	0600 LORAN FIX 40°40'N 61°44'W	
0812 SPM pumping Ingram 1009 Bbls 0844 BARRY ALONGSIDE 0829 LAST LINE SLIPPED INGRAHAM - STOPPED PUMPING BARRY - 1177 BBLS REC'D PASSED 0848 FIRST LINE TO BARRY 0830 LAST LINE SLIPPED BARRY	0835 FIX LORAN 40°52'N 61°38'W	
0909 ONE MAN TRANSFERRED ONBOARD FROM BARRY 0920 SECURE RAS STATIONS 0917 LAST LINE SLIPPED BARRY A/C 195° SP 19	0925 FIX LORAN 40°55'N 61°32'W	
	1030 FIX LORAN 40°34'N 61°41'W	
1125 - JP5 READY USE TANK RECIRCULATED	1130 FIX LORAN 40°20'N 61°45'W	
1255 Sp 12 1259 A/C 050°(T)	1230 LORAN FIX 40° 00'N 61° 50'W	
1339 USCG CALLATIN ALONGSIDE 1345 FIRST LINE PASSED 1400 COMMENCED PUMPING	1330 LORAN FIX 39° 04'N 60° 44'W	
1443 COMPLETED PUMPING 1000 BBLS JP5 1456 LAST LINE SLIPPED	1430 LORAN FIX 40°04'N 61 33'W	
1504 A/C 170° - - - 1547 FIRST LINE PASSED 1518 A/C 050 1545 USS ROAN ALONGSIDE	1535 LORAN FIX 40° 04'N 61° 26'W	
1602 COMMENCED PUMPING FUEL 1634 COMPLETED PUMPING 1136 Bbls passed 1645 SLIPPED USS ROAN 1647 A/C 328	1650 LORAN FIX 40°10'N 61°08'W	
1702 A/C 300(T) 31nm 1735 Sp 12	1750 LORAN FIX 40 18 N 61 21 W	
1853 SUNSET NAV LTS S/W ON	1830 FIX LORAN 40°23'N 61°33'5W	
	1945 FIX LORAN 40°29'N 61 44 W	
2100 A/C 010° SP 11	2030 LORAN FIX 40° 34'N 61° 55'W	
	2130 LORAN FIX 40° 44'N 62° 02'W	
	2230 LORAN FIX 40° 58'N 62° 00'W	
	2330 LORAN FIX 41° 11'N 61° 57'W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	40°47'N	61°44'W	LORAN				
1200	40°09'N	61°45'W	LORAN				
2000	40°39'N	61°47'W	LORAN				

HMCS PROTECTEUR SATURDAY 25th OF April

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		4057.95	10.5	54.9	010°	010°	030°	2°E	22°W												
0200		4067.82	10.5	46.3	010°	010°	030°	2°E	22°W												
0300		4077.07	10.5	43.2	010°	010°	030°	2°E	22°W												
0455 0400	+4	4085.81	9.5	39	010°	010°	030°	2°E	22°W	8	130	22	1	030	3	98	02	1016	6.1	5.6	6.7
0458					170°	170°	195°	2°E													
0500		4091.62	5.8	31.8	170°	170°	195°	2°E	22°W												
0600		4101.08	9.4	50	VAR	VAR	VAR	VAR	22°W												
0700		4107.36	6.2	38	VAR	VAR	VAR	VAR	22°W												
0706					170°	170°	195°														
0800	+4	4116.02	8.7	47.6	170°	170°	195°	2°E	22°W	8	152	28	3	150	8	97	02	1011.5	8.8	8.3	8.9
0900		4130.35	13.9	69.7	330	330	351	1E	22W												
1000		4145.62	13.9	69.1	330	330	351	1E	22W												
1032 1100		4157.15	12.2	59.1	180	180	201	1E	22W												
1115					180	180	201	1E													
1200	+4	4169.58	13.0	64.4	270	270	291	1E	22W	8	155	32	3	150	8	96	45	1004	8.9	8.3	5.0
1300		4183.45	12.0	67.1	270	270	291	1E	22°W												
1400		4197.49	14.0	72.0	270	270	291	1E	22°W												
1500		4211.24	13.0	71.4	270	270	290	1E	21°W												
1505					270	270	290	1°E													
1600	+4	4216.53	7.0	29.4	300	300	321	0	21°W	6	260	20	4	160	8	98	02	1004	5.6	5.0	4.4
1601					270	270	290	1°E													
1647					300	300	320														
1700		4222.38	5.8	35.4	300	300	320	1°E	21°W												
1727					157	157	180	2°W													
1757					030	030	050	1°E													
1800	+4	4230.27	7.9	43.1	030	030	050	1°E	21W	7	305	18	3	150	6	98	02	1004	5.5	5.0	4.4
1900		4237.21	7.0	38.7	035	035	056	0	21W												
2000	+4	4245.46	8.2	38.6	035	035	056	0	21W	0	290	27	2	150	6	98	05	1006.6	4.9	3.9	4.4
2100		4252.82	7.4	38.6	035	035	056	0	21W												
2200		4261.11	8.3	38.6	035	035	056	0	21W												
2300		4270.81	9.7	36.9	035	035	056	0	21W												
2330	+4	4272.93	2.1	36.8	035	035	056	0	21W	1	280	24	2	270	4	98	02	1008			
2400																					

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
226.5mi		

1970 FROM HALIFAX TO , OR AT SEA

REMARKS					Initials of the Officer of the Watch
0016 COMMENCED PUMPING BILGES 0040 SP 10				0030 LORAN FIX { 41° 21'N 61° 53'W	
				0130 LORAN FIX { 41° 31'N 61° 49'W	
0230 SP 9 0235 FINISHED PUMPING BILGES				0230 LORAN FIX { 41° 41'N 61° 46'W	
0330 SP 6 0400 SWITCH TO HAND CONTROL				0330 LORAN FIX { 41° 51'N 61° 45'W	
0445 HANDS TO FLYING STATIONS ASSUME CONDITION "Y" 0455 A/C 170 SP 10				0410 FIX LORAN { 41° 56.5'N 61° 34'W	
0503 SHOPLIFTER 24 (HELO) ON DECK 0504 HELO DISENGAGED 0506 HELO SHUT DOWN	0512 A/C 090 SUNRISE NAV LTS S/W OFF 0515 SECURE FLYING STATIONS		0540 SP 15 0550 SP B A/C 270 0555 A/C 280 SP 6	0525 FIX LORAN { 41° 59'N 61° 39'W	
0620 A/C 300 SP B 0625 CARRYING OUT BROAD WEAVE ON 270°	0650 HANDS TO FLYING STATIONS A/C 090 SP 10			0630 FIX LORAN { 42° 02'N 61° 38'W	
0705 A/C 170 0713 HELO-NONCHALAUNT 20 ON DECK 0718 HELO NONCHALAUNT 20 OFF DECK	0730 HANDS TO RAS STATIONS 0742 HELO NONCHALAUNT 20 ON DECK 0745 HELO NONCHALAUNT 20 OFF DECK		0755 HELO NONCHALAUNT 20 ON DECK 0758 HELO-NONCHALAUNT 20 OFF DECK 0759 SECURE FLYING STATIONS	0800 FIX LORAN { 42° 03'N 61° 41'W	
0800 A/C 330° SP 15 0804 SP 14	0814 ANNAPOLIS ALONGSIDE STN 2 0815 FIRST LINE ACROSS 0822 NIPIGON ALONGSIDE STN 1 0828 FIRST LINE ACROSS		0832 START PUMPING TO ANNAPOLIS 0846 LINES RETURNED FROM NIPIGON 0849 STOP PUMPING ANNAPOLIS 1000 BBLS DISTILLATE 0856 LAST LINE SLIPPED		
0904 FIRST LINE TO NIPIGON 0914 START PUMPING 0939 STOP PUMPING 1200 BBLS DISTILLATE 0944 LAST LINE SLIPPED	0955 HANDS TO FLYING STNS			0915 LORAN FIX { 41° 21'N 65° 44'W	
1019 SECURE RAS STNS 1032 A/C 180° SP 10 1037 SHOPLIFTER 24 ENGAGED 1045 HELO TOOK OFF				1015 LORAN FIX { 42° 24'N 61° 57'W	
1101 SHOPLIFTER 24 ON DECK 1102 HELO DISENGAGED 1104 HELO SHUT DOWN SECURE FLYING STNS	1115 A/C 270°			1115 LORAN FIX { 42° 21'N 61° 58'W	NKR
1225 COMMENCED SOUNDING FOG SIGNALS				1230 LORAN FIX { 42° 22'N 62° 20'W	
1320 CEASED SOUNDING FOG SIGNALS				1330 LORAN FIX { 42° 21'N 62° 36'W	
1500 SP B 1503 SP 6 1505 A/C 300				1430 LORAN FIX { 42° 22'N 62° 55'W	
				1530 LORAN FIX { 42° 23.5'N 63° 08'W	
1601 A/C 270 1635 HANDS TO FLYING STATIONS 1647 A/C 300 SP 10	1655 HELO (SHOPLIFTER 24) STARTED 1658 HELO ENGAGED			1600 FIX LORAN { 42° 28'N 63° 11'W	
1703 HELO AIRBORNE 1727 SECURE FLYING STATIONS A/C 157 SP B	1757 A/C 030 1800 A/C 035			1730 FIX LORAN { 42° 25'N 63° 22'W	
1859 SUNSET NAV LIGHTS SWITCHED ON				1830 LORAN FIX { 42° 25'N 63° 23'W	
2003 REVERT TO NAC0 XRAY				1930 LORAN FIX { 42° 30'N 63° 20'W	
				2030 LORAN FIX { 42° 35'N 63° 15'W	
				2130 LORAN FIX { 42° 41'N 63° 09'W	
				2230 LORAN FIX { 42° 46'N 63° 01'W	
2330 CONVERTED TO DAYLIGHT SAVING TIME					

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	42° 03' N	61° 41' W	LORAN				
1200	42° 23' N	62° 08' W	LORAN				
2000	42° 38' N	63° 05' W	LORAN				

HMCS PROTECTEUR — SUNDAY — 26TH OF APRIL

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: Direction (True)	Wind: Speed (Knots)	Sea Height (In Feet)	Swell: Direction From (True)	Swell: Height (In Feet)	Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius): Dry Bulb	Temperature (Celsius): Wet Bulb	Temperature (Celsius): Sea
0100		4276.02	3.1	36.9	035	035	056	0	21°W												
0145					115	115	135	2°E													
0200		4283.85	7.8	38.6	180	180	203	1°W	22°W												
0215					342	342	004														
0300		4296.00	12.2	66.8	342	342	004	0	22°W												
0400	+3	4312.11	16.1	77	342	342	004	0	22W	8	273	29	3	270	6	98	02	1007	4.5	2.6	3.9
0500		4327.50	15.4	77.1	342	342	004	0	22W												
0600		4343.43	16.0	77.9	342	342	004	0	22W												
0700		4358.95	15.5	78.6	342	342	004	0	22W												
0754					335	335	357	0	22												
0800	+3	4374.96	16.0	79.4	335	335	357	0	22	0	258	23	2	270	5	98	02	1009	4.4	3.9	
0900		4391.90	17.0	82.6	335	335	357	1E	23W												
1000		4399.15	7.2	32.8	VAR	VAR	VAR	VAR	23W												
1100		4413.03	3.9	70.1	VAR	VAR	VAR	VAR	23W												
1200	+3	4420.37	7.3	60.1	VAR	VAR	VAR	VAR	23W	0	265	22	2	200	2	98	05	1010	4.4	2.8	3.6
1207					180	180	204	1°W													
1220					240	240	263	0													
1300		4433.09	12.7	63.9	180	180	204	1°W	23°W												
1312					180	180	204	1°W													
1400		4445.92	12.8	63.6	210	210	231 ~~230~~	2°E	23°W												
1500		4458.66	12.7	63.4	210	210	231	2°E	23°W												
1600	+3	4471.49	12.8	63.5	210	210	231	2°E	23°W	0	283	21	1	220	4	98	02	1010	6.5	3.5	2.2
1700		4484.31	12.9	63.4	210°	210°	231°	2°E	23°W												
1800	+3	4497.26	13.4	63.3	210°	210°	231°	2°E	23°W	1	278	25	1	240	5	98	02	1007	6.7	6.1	
1900		4509.88	12.8	63.3	210°	210	231	2E	23W												
2000	+3	4522.68	12.8	63.3	210	210	231	2E	23W	0	285	24	1	250	4	98	05	1015	4.4	3.8	2.8
2100		4534.49	11.9	56.2	210	210	230	1E	21W												
2200		4545.80	12.0	57.3	210	210	230	1E	21W												
2300		4557.43	11.9	54.3	210	210	230	1E	21W												
2400	+3	4568.55	11.1	54.2	210	210	230	1E	21W	0	280	17	1	220	4	98	02	1017	4.4	3.9	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
287.3MI		

19 70 FROM — TO — , OR AT SEA.

REMARKS				Initials of the Officer of the Watch
			0030 FIX. LORAN {42°52'N 63°00W	
0145 A/C 115°			0130 FIX LORAN {42°59'N 62°54'W	
0200 A/C 180				
0215 A/C 342 SP 16			0230 FIX LORAN {43°00'N 62°50'W	
			0330 FIX LORAN {43°16'N 62°56W	JAW
			0430 LORAN FIX {43°31'N 63°02'W	
			0545 DECCA FIX {43°48'N 63°03'W	
0611 - SUNRISE NAV LIGHTS SWITCHED OFF			0630 DECCA FIX {43°58.1'N 63°12.2'W	
0733 - SP-17			0700 DECCA FIX {44°04.8'N 63°15.3'W	
0754 - A/C 335 SP 18				DWM
0830 SSD CLOSE UP NBCD COND "YANKEE"			0810 RA FIX. {SAMBRO Is 8.0 DEVIL Is 13.4 CHEBUCTO HD 9.0	
0900 a/c 355°				
0917 Sp 4	0945 HANDS TO FLYING STNS		0932 VIS FIX {GEORGES Is LT 321 FLAME TOWER 036½ WATER TOWER 000	
0925 a/c 015°	0955 Co 162 Sp 12			
0928 ~~Stop~~ M/R Sp 0 Co + Sp VARIABLE TO DROP OFF PERSONEL	0956 Sp 15			
1006 a/c 175°	1033 Co + Sp VARIABLE TO RECOVER HELO		1022 VIS FIX {MAUGHER'S BEACH 340 DEVIL'S Is 010 SAMBRO Is 229	
1012 a/c 158 Sp 19	1034 CLOVER TOP 29 ON DECK	Co 158 Sp 8		
1015 SECURE SSD	1037 ~~HELO~~ HELO DISENGAGED			
1030 Sp 8	1045 HELO SHUT DOWN			
1114 a/c 140°	1136 HELO OFF	1158 a/c 180° Sp 13	1130 RA FIX {SAMBRO Is 7.5 KETCH HD 8.4 DEVIL Is 12.7	
1115 HANDS TO FLYING STNS	1146 START CLOVERTOP 16	1158 SECURE FLYING STNS		
1129 a/c 295°	1154 ENGAGE HELO	REVERT TO NBCD "XRAY"		
1134 CLOVERTOP 14 ON DECK	1158 HELO OFF			
1207 a/c 240				
1220 a/c 180			1230 Decca Fix {44°18'N 63°34'W	
1312 a/c 210			1330 Decca Fix {44°05'N 63°37.6'W	
			1430 Decca Fix {43°54'N 63°47.5'W	
			1530 Decca Fix {43°44.2'N 63°56.1'W	DER
			1630 DECCA FIX {43°31.2'N 64°04.4'W	
			1730 DECCA FIX {43°19.5' 64°13.5'	dlw
			1820 DECCA FIX {43° 09.5'N 64° 21.6'W	
			1930 DECCA FIX {42° 58.0'N 64° 30.5'W	DWM
2013 SUNSET DARKEN SHIP ~~NAV LIGHTS ON~~ NAV LIGHTS SWITCHED ON			2030 LORAN FIX {42 47N 64 40W	
			2100 LORAN FIX {42 42.5N 64 43W	
			2200 LORAN FIX {42 33N 64 51W	
			2300 LORAN FIX {42 24N 64 59W	JAW

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	44° 18.8 N	63° 22.5W	DECCA				
1200	44° 22.4 N	63° 29.0W	Ra + Vis				
2000	42° 52.2	64° 35.2	DECCA				

HMCS PROTECTEUR MONDAY 27TH OF APRIL

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		4579.04	10.4	49.2	210°	210°	230°	0	20°W												
0200		4589.11	10.1	47.5	210°	210°	230°	0	20°W												
0300		4598.81	9.7	47.4	210°	210°	230°	0	20°W												
0400	+3	4609.04	10.2	47.4	210°	210°	230°	0	20°W	1	255	14	0	185	2	98	02	1017	5.0	4.4	
0500		4618.70	9.7	47.3	210	210	228	2E	20W												
0545					210	210	228	2E													
0600		4627.30	9.4	46.6	180	180	198	2E	20W												
0610					180	180	198														
0700		4636.54	9.2	46.6	050	050	068	8W	20W												
0800	(+3)	4649.29	12.7	59.0	050	050	068	8W	20W	0	220	16	1	230	2	98	05	1017.5	7.8	6.7	6.1
0801 0844 0900		4667.73	18.5	89.3	103 120 100	103 120 100	126 143 123	3°W	20W												
1000		4685.33	18.0	89.7	VAR	VAR	VAR	VAR	20W												
1021 1100		4700.20	14.7	70.7	113 045	113 045	126 065	3°W 0	20W												
1200	(+3)	4713.12	12.9	59.3	045	045	065	0	20W	0	230	16	1	225	2	98	02	1018	8.3	7.8	
1300		4725.87	12.7	59.3	045°	045	065	1°E	21°W												
1335 1400		4740.41	14.6	72.0	069° 069°	069° 069	091° 091	1°W	21°W												
1444 1450 1500		4760.90	20.5	87.6	250° 069° 069°	250° 069° 069°	271° 091° 091°	0 1°W	2 21°W												
1553 1600	(+3)	4776.09	15.1	87.2	255° 255°	255° 255°	276° 276°	0	21°W	0	200	20	2	240	2	98	02	1016	7.8	6.7	
1620 1700		4790.30	14.3	73	255 069	255 069	276° 091	0 1W	21W												
1705 1800	+3	4804.08	13.7	61.7	069 060	069 060	091 082	1W 1W	21W	0	200	20	2	240	5	98	05	1016	7.8	6.7	8.3
1805 1900		4815.50	10.7	52.6	060 340	060 340	082 001	1W 1E	21W 22W												
2000	+3	4827.50	11.9	57.1	345 ~~340~~	345	006	1E	22W	0	248	21	2	260	5	98	02	1015	6.7	5.6	5.0
2100		4839.40	11.8	57.2	345°	345°	006°	1°E	22°W												
2200		4850.42	11.0	50.2	345°	345°	006°	1°E	22°W												
2300		4860.50	10.1	47.8	345°	345°	006°	1°E	22°W												
2400	+3	4870.68	10.2	47.6	345°	345°	006°	1°E	22°W	2	250	27	3	270	5	97	02	1013	6.1	5.6	4.9

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

19 70 FROM _____ TO _____ ; OR AT SEA.

REMARKS		Initials of the Officer of the Watch
0015 SP 10	0001 FIX LORAN 42°14'N 65°08'W	
	0101 FIX LORAN 42°05'N 65°16'W	
	0201 FIX LORAN 41°56'N 65°22'W	
	0310 FIX LORAN 41°46'N 65°30'W	SK
	0400 LORAN FIX 41° 38'N 65° 36'W	
0535 Sp 6 0545 a/c 180°	0515 LORAN FIX 41° 28'N 65° 43'W	
0600 HANDS TO RAS STNS 0610 a/c 050° (T) 0628 SUNRISE NAV LIGHTS 0629 Sp 12 SWITCHED OFF 0648 USS INGRAHAM ALONGSIDE 0650 FIRST LINE ACROSS	0630 LORAN FIX 41° 22'N 65° 45'W	
0705 START PUMPING 0742 STOP PUMPING 1317 BBLS FFO 0758 LAST LINE SLIPPED 0759 SECURE RAS STATIONS	0800 LORAN FIX 41 34·5N 65 27·5W	SK
0801 a/c 103 Sp 18 0830 HANDS TO EMERGENCY STATIONS FIRE IN STBD T.A. NBCD cond 2 0837 SECURE EMERGENCY STATIONS REVERT TO NBCD 1 0844 a/c 120 0846 a/c 100	0900 LORAN FIX 41 32 N 65 10 W	
0900 ELYNT CLASS VESSEL 41 32N 6510W 0900 a/c 040 0915 a/c 100 0907 a/c 050 0920 a/c 113 0911 a/c 105 0913 a/c 080	1000 LORAN FIX 41 30N 64 49W	
1020 HANDS TO RAS STATIONS 1021 a/c 045 Sp 12 1025 RAS SSP CLOSE UP 1045 USS ROAN ALONGSIDE FIRST LINE ACROSS 1100 COMMENCED PUMPING		NRR
1130 STOPPED PUMPING 1354 BBLS 1142 USS ROAN SLIPPED 1150 USS BARRY ALONGSIDE 1153 FIRST LINE ACROSS 1207 COMMENCED PUMPING	1200 LORAN FIX 41 40N 64 21 W	SK
	1300 FIX LORAN 41°48'N 64°10·5W	
1319 STOP PUMPING (1913 BBLS) 1335 a/c 069 1333 LAST LINE SLIPPED SP 18 1334 SECURE RAS STATIONS	1335 FIX LORAN 41°54'N 64°02'W	
1428 HANDS TO FLYING STATIONS 1444 a/c 250 SP 13 1445 HELO SHOPLIFTER 24 ON DECK 1447 HELO DISENGAGED 1450 a/c 069 - SP 18 - HELO SHUT DOWN - SECURE FLYING STATIONS.	1400 FIX LORAN 41°57'N 63°52'W	
1545 HANDS TO FLYING STATIONS 1550 START SHOPLIFTER 24 1553 a/c 255° 1565 SP 9	1500 FIX LORAN 42°02·5N 63°34·5W	JW
1602 HELO ENGAGED 1607 HELO OFF 1608 NONCHALANT 20 MAKING FINAL APPROACH 1610 HELO ON DECK 1615 HELO OFF 1620 SECURE FLYING STNS a/c 069 SP 18	1630 LORAN FIX 42° 07'N 63° 17'W	
1700 HANDS TO RAS STNS 1705 a/c 060 1718 SKEENA ALONGSIDE (STBD) 1719 FIRST LINE ACROSS 1721 ANNAPOLIS ALONGSIDE (PORT) 1723 FIRST LINE ACROSS 1731 START PUMPING TO BOTH 1748 STOP PUMPING TO ANNAPOLIS, 646 BBLS PASSED (DISTILLATE) 1754 ANNAPOLIS SLIPPED 1759 STOP PUMPING TO SKEENA, 1197 BBLS PASSED (DISTILLATE)	1700 LORAN FIX 42° 10'N 63° 04'W	SK
1804 SKEENA SLIPPED 1805 SECURE RAS STATIONS a/c 360 1808 Sp 6 1819 Sp 12 1900 a/c 365°	1800 LORAN FIX 42 16N 62 50W	
	1900 LORAN FIX 42 27N 62 50W	SK
2005 SUNSET NAV LTS. S/W ON. GYRO CORRECT BY BRG. AMP.	2000 FIX LORAN 42°37'N 62°54'W	
2115 SP 10	2105 FIX LORAN 42°49'N 62°56'W	
	2200 FIX LORAN & DECCA 42°58'N 62°58'W	
	2300 FIX LORAN & DECCA 43°06·5N 63°01·5W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	41°34·6N	65° 27·5W	LORAN				
1200	41° 40'N	64° 21W	LORAN				
2000	42°37'N	62°54'W	LORAN				

HMCS PROTECTEUR TUES DAY 28th OF APRIL

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		9881.21	10.5	49.3	345	345	006	1°E	22°W												
0200		9891.96	10.7	54.7	345	345	006	1°E	22°W												
0300		4901.88	10	96	345	345	006	1°E	22°W												
0400	+3	4914.32	12.5	49.9	345	345	006	1°E	22°W	0	230	22	1	200	4	98	02	1012.5	4.4	4.4	
0500		4924.32	10.0	50.0	345	345	006	1E	22W												
0600		4934.71	10.4	49.9	345	345	006	1E	22W												
0700		4945.62	10.9	49.9	345	345	006	1E	22W												
0800	+3	4957.04	11.4	52.2	VAR	VAR	VAR	VAR	22W	8	228	25				96	44	1017	6.1	5.0	2.2
0900		4963.35	6.3	25.9																	
1000																					
1100																					
1200	+3									0	CALM					98	02	1017	20.6	20	
1300																					
1400																					
1500																					
1600										7	CALM					98	03	1016.5	13.9	12.8	
1700																					
1800																					
1900																					
2000	+3	4965.09	8.1	27.6	VAR	VAR	VAR	VAR	22W	8	CALM		—	—	—	98	02	1017	13.9	12.8	
2100																					
2200																					
2300																					
2400										8	CALM					98	03	1018	12.2	10.8	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
86.4mi	SHIP'S COMPANY NRFD 2030- 0755 THE	

1970 · FROM · TO · , OR AT SEA

REMARKS			Initials of the Officer of the Watch
0013 - SP 11	0032 DECCA FIX	43°18.8'N 63°03.5'W	
0112 - SP 12	0130 DECCA FIX	43°28.6'N 63°07.5'W	
0207 - SP 10	0230 DECCA FIX	43°39.5'N 63°11.5'W	
0303 - SP 11	0300 DECCA FIX	43°43.9'N 63°13.1'W	
	0430 DECCA FIX	43° 59.4'N 63° 18.0'W	
0610 SUNRISE. NAV LTS SWITCHED OFF	0638 RA FIX	SAMBRO Is 9.3 KETCH HD 10.6	
0730 - Hands to Stations for entering harbour.	0730 RA FIX	SAMBRO Is 4.3 KETCH HD 2.62	
0745 - S.S.D. Close up - Condition YANKEE - Co + Sp. on messdecks for entering harbour.			
0826 - Pilot aboard.			
0835 - RIVERTON and tugs secured forward and aft. Commenced final approach PIER 3 IMPERIAL.		0900 - Secured PIER 3 IMPERIAL - STBD SIDE TO. - Secured S.S.D. - Hands to Condition XRAY.	
0900 HANDS EMPLOYED BY DEPARTMENTS			
1115 DIVERS DOWN - POWER GAGUE TEST			
1145 DIVE COMPLETE			
1201 COMMENCED EMBARKING DISTILATE			
1500 ONE MAN JOINED SHIP FROM "CFB HALIFAX"			
1530 TWO MEN JOINED SHIP FROM "CFB HALIFAX"			
1715 COMMENCED EMBARKING IPS			
1845 - SSD CLOSE UP HANDS TO STATIONS FOR SHIFTING SHIP ASSUME CONDITION Y			
1858 - RIVERTON PORT QUARTER			
1850 - STOPPED PUMPING FUEL 13 BBLS IPS 13 BBLS DISTILATE EMBARKED			
1902 - COMMENCED USING BOW THRUSTER; 1910 - SP 10; 1928 - SP 6; 1948 - SECURE SSD REVERT TO CONDITION X			
1903 - LAST LINE LAT GD; 1912 - SP 9; 1923 - STOP ENGINE			
1903 - CO 9 SP VARIOUS TO SHIFT SHIP; 1916 - SP 8; 1926 - ASTERN ENGINE SP 6		1950 FIX: MICROTOWER 275; ST MARY'S 196; WATER TOWER 078	
1906 - AHEAD ENGINE SP 8; 1917 - AR 360; 1945 - FIRST LINE ASHORE JETTY 6			
2018 - SUNSET			
2030 - SECURE			
2100 ROUNDS CORRECT			

Position	Latitude	Longitude	Depending on	Draught Time	Draught Forward	Draught Aft	Notice for Main Engines at Noon
0800	° '	° '					4 HRS
1200	° '	° '					
2000	° '	° '					

HMCS PROTECTEUR WEDNESDAY 29th OF APRIL

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: Direction (True)	Wind: Speed (Knots)	Sea Height (In Feet)	Swell: Direction From (True)	Swell: Height (In Feet)	Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius): Dry Bulb	Temperature (Celsius): Wet Bulb	Temperature (Celsius): Sea
0100																					
0200																					
0300																					
0400										0	CALM					98	01	1018.5	7.2	6.7	
0500																					
0600																					
0700																					
0800										2	CALM					98	03	1020.5	6.1	6.1	
0900																					
1000																					
1100																					
1200	+4									0	CALM					98	03	1022	16.1	15.6	
1300																					
1400																					
1500																					
1600										2	315	8				98	02	1020.5	15.0	13.3	
1700																					
1800	+3	4986.68	11.1	53	VAR	VAR	VAR	VAR	23°W	2	240	6	-	-	-	98	02	1020	13.9	12.8	4.1
1900		5003.76	16.4	83.9	131	131	158	4°W	23°W												
2000	+3	5018.02	14.7	84.7	131	131	158	4°W	23°W	2	250	20	1	170	3	98	02	1018	5.0	3.3	0.6
2100		5038.27	17.0	84.5	131	131	158	4W	23W												
2134					131	131	158	4W													
2200		5055.26	17.0	84.5	165	165	189	1W	23W												
2256					165	165	189	1W													
2300		5073.19	17.0	84.6	175	175	198	0	23W												
2330					175	175	198	0													
2400	+3	5090.59	17.0	84.6	127	127	152	2W	23W	0	210	7	1	100	2	98	02	1022	3.3	2.8	4.4

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

1970 **FROM** **TO** , **OR AT** HALIFAX, N.S.

REMARKS	Initials of the Officer of the Watch
0507 SUNRISE	
0800 - COLOURS HANDS EMPLOYED AT CLEANING STATIONS	
1630 - HANDS TO STATIONS FOR LEAVING HARBOUR. SSD CLOSE UP ASSUME CONDITION Y 1656 - GLENEVIS TOWLINE ASTERN 1703 - GLENEVIS SHIP 1727 - A/C 185 1753 - A/C 158 1715 - Co IAA 1735 - A/C 159 1758 - SECURE SSD 1718 - A/C 106 1736 - SP 15 REVERT TO CONDITION X 1734 - A/C 135 1747 - A/C 175 1800 - A/C 131 1658 - LAST LINE AWAY GD 1700 - CO & SP VARIOUS TO LEAVE HARBOUR COMMENDED USING BOW THRUSTER 1721 FIX VIS { DOT JETTY 4.6 C; GEORGE 16 6.6 C; IRVING JETTY 9.3 C } 1834 DECCA FIX { 44° 26.6'N; 63° 29.5'W } 1930 DECCA FIX { 44° 15.2'N; 63° 06.2'W }	DCR.
2004 LIFE BUOY ALARM TESTED 2012 SUNSET NAV LTS SWITCHED ON 2030 DECCA FIX { 44° 04'N; 62° 47'W }	
2134 A/C 165 TO AVOID FISHING FLEET 2130 DECCA FIX { 43° 52'N; 62° 30'W }	
2256 A/C 175 2230 DECCA FIX { 43° 29'N; 62° 23'W }	
2330 A/C 127 2330 LORAN FIX { 43° 21'N; 62° 24'W }	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ′	° ′					
1200	° ′	° ′					4 HRS
2000	44° 09.7′ N	62° 57.2 W	DECCA				

HMCS PROTECTEUR THURSDAY 30th OF APRIL

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		5108.07	17.0	84.6	127	127	152	2°W	23°W												
0200		5126.50	16.7	86.5	127	127	152	2°W	23°W												
0300		5142.40	16.7	86.5	127	127	152	2°W	23°W												
0400	+3	5160.67	16.7	84.5	127	127	152	2°W	23°W	1	250	10	1.0	140	2	98	02	1023	3.9	2.2	5.6
0500		5178.09	17.4	84.5	127°	126°	152°	2°W	23°W												
0600		5195.63	17.6	84.6	127°	126°	152°	2°W	23°W												
0700		5213.50	17.9	84.7	127°	126°	152°	2°W	23°W												
0800	+3	5230.45	18.0	84.0	127°	126°	152°	2°W	23°W	1	340	17	1	340	4	98	02	1024	4.4	3.9	6.1
0900		5246.78	17.6	77.3	127	127	152	2W	23W												
1000		5263.10	15.8	77.2	127	127	152	2W	23W												
1100		5279.22	15.5	76.1	127	127	152	2W	23W												
1200	+3	5295.11	15.2	77	127	127	152	2W	23W	3	011	24	3	000	4	98	02	1026	5.6	6.0	11.1
1300		5310.60	15.8	77	127	127	152	2W	23W												
1400		5326.39	15.8	77	127	127	152	2W	23W												
1500		5340.92	14.0	69.8	127	127	152	2W	23W												
1600	+3	5354.47	13.5	66.3	127	127	152	2W	23W	7	010	20	2	070	4	98	03	1025	7.2	5.0	14.4
1700		5370.20	15.8	76.8	127	126	152	2W	23W												
1800	+3	5386.35	16.1	77.5	127	126	152	2W	23W	7	015	20	2	020	5	98	02	1025	6.7	5.0	15.8
1805					127	127	152	2W	23W												
1900		5399.01	12.7	59.7	180	180	208	5W	23W												
2000	+3	5411.12	12.1	55.6	180	180	208	5W	23W	6	340	16	2	020	5	98	02	1027	7.8	6.7	16.7
2035					180	180	208	5°W													
2100		5422.96	12.0	55.9	010	010	031	2°E	23°W												
2200		5434.35	12.0	55.3	010	010	031	2E	23W												
2300		5445.46	12.0	55.3	010	010	031	2E	23W												
2400	+3	5457.48	12.0	55.3	010	010	031	2E	23W	6	060	10	2	010	3	98	02	1027	7.8	5.6	14.4

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

1970 FROM HALIFAX TO , OR AT SEA

REMARKS		Initials of the Officer of the Watch
0045 COMMENCED PUMPING OILGAS	0030 LORAN FIX 43° 12.5N 62° 08'W	
	0130 LORAN FIX 42°59'N 61°49'W	
0245 COMPLETED PUMPING OILGAS	0230 LORAN FIX 42°53'N 61° 34'W	
	0330 LORAN FIX 42° 40'N 61° 06'W	
	0430 LORAN FIX 42°32'N 60 58 W	
	0530 FIX LORAN 42°20'N 60°37'W	
0601 SUNRISE. NAU. LTS. S/W OFF GYRO 1°LOW BY ORG AMP.	0630 FIX LORAN 42° 11'N 60°20'W	
0755 SP16	0730 FIX LORAN 42° 01'N 60° 02'W	
	0830 LORAN FIX 41° 51'N 69° 43'W	
	0930 LORAN FIX 41° 41'N 59° 29'W	
	1030 LORAN FIX 41° 32'N 59° 13'W	
	1130 LORAN FIX 41° 24'N 58° 58'W	
	1230 LORAN FIX 41° 16' 58°42'W	
	1330 LORAN FIX 41°04'N 58°21'W	
1420 SP14	1400 LORAN FIX 40°56'N 58°07'W	
	1500 LORAN FIX 40° 51'N 57°55'W	
1610 SP 16	1700 FIX LORAN 40° 37'N 57° 33'W	
	1740 FIX LORAN 40°31'N 57°23'W	
1752 HANDS TO RAS. STN.	1805 FIX LORAN 40° 27'N 57° 15'W	
1805 a/c 180°(T) SP12 1806 ASSUME CONDITION "Y" 1807 SSD CLOSE UP 1825 USCG CALLATIN ALONGSIDE 1829 FIRST LOAD 84 JACKSTAY TO INGRAHAM 1830 FIRST LINE ACROSS 1854 START PUMPING 1855 USS INGRAHAM ALONGSIDE 1856 FIRST LINE ACROSS	1900 FIX LORAN 40° 16'N 57° 16'W	
1919 START PUMPING TO INGRAHAM 1940 SUNSET TASK AND NAVIGATION LTS SWITCHED ON 1959 STOP PUMPING TO INGRAHAM - (1150 bbls NSFO, 2080 lbs dry goods) 2014 INGRAHAM SLIPPED 2018 STOP PUMPING TO CALLATIN ~~(2130~~ (2130 BBLS JP5 PASSED). 2034 CALLATIN SLIPPED 2035 a/c 010° 2043 ROAN ALONGSIDE 2051 FIRST LINE TO ROAN 2100 - SPAN WIRE TENSIONED	2100 FIX LORAN 39°49'N 57°20'W	
2108 USS BARRY ALONGSIDE 2109 FIRST LINE TO BARRY 2115 START PUMPING TO ROAN 2120 SPAN WIRE TENSIONED ON BARRY 2129 - START PUMPING ON BARRY 2145 STOP PUMPING ON ROAN 2146 START BLOW THROUGH ON BARRY 2150 STOP BLOW THROUGH 2150 STOP PUMPING TO BARRY 2155 SPAN WIRE DETENSIONED ON ROAN 2156 SPAN WIRE SLIPPED FROM ROAN 2158 ROAN SLIPPED 2159 STOP PUMPING TO BARRY		
2201 START BLOW THROUGH TO BARRY 2208 STOP BLOW THROUGH 2213 SPAN WIRE DETENSIONED 2214 BARRY SLIP 2238 BARRY ALONGSIDE 2239 FIRST LINE TO BARRY 2239 SPAN WIRE TO BARRY		
2319 START PUMPING		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	41°55'N	59°52'W	LORAN				
1200	41°19'N	58°50'W	LORAN				
2000	40°11'N	57°19'W	LORAN				

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 manœuvre 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 (225 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 manœuvre as required by these Rules shall, instead of the signals prescribed in subsections (i), (*ii*) *and* (*iii*) *sound, at intervals of not more than 1 minute,* three blasts in succession, namely, one prolonged blast followed by two short blasts.

(vi) A vessel towed, or, if more than one vessel is towed, only the last vessel of the tow, if manned, shall, at intervals of not more than 1 minute, sound four blasts in succession, namely, one prolonged blast followed by three short blasts. When practicable, this signal shall be made immediately after the signal made by the towing vessel.

(vii) A vessel aground shall give the signal prescribed in subsection (iv) and shall, in addition, give three separate and distinct strokes on the bell immediately before and after each such signal.

(viii) A vessel of less than 20 tons, a rowing boat, or a seaplane on the water, shall not be obliged to give the above-mentioned signals, but if she does not, she shall make some other efficient sound signal at intervals of not more than 1 minute.

(ix) A vessel when fishing, if of 20 tons or upwards, shall at intervals of not more than 1 minute, sound a blast, such blast to be followed by ringing the bell; or she may sound, in lieu of these signals, a blast consisting of a series of several alternate notes of higher and lower pitch.

Rule 16

Speed to be moderate in fog, etc.

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

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

Part C.—Steering and Sailing Rules

Preliminary

1. *In obeying and construing these Rules, any action taken should be positive, in ample time, and with due regard to the observance of good seamanship.*

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

3. *Mariners should bear in mind that seaplanes in the act of landing or taking off, or operating under adverse weather conditions, may be unable to change their intended action at the last moment.*

Rule 17

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

(*a*) A vessel which is running free shall keep out of the way of a vessel which is close-hauled.

(*b*) A vessel which is close-hauled on the port tack shall keep out of the way of a vessel which is close-hauled on the starboard tack.

(*c*) When both are running free, with the wind on different sides, the vessel which has the wind on the port side shall keep out of the way of the other.

(*d*) When both are running free, with the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to leeward.

(*e*) A vessel which has the wind aft shall keep out of the way of the other vessel.

Rule 18

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

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

Rule 19

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

Rule 20

(*a*) When a power-driven vessel and a sailing vessel are proceeding in such directions as to involve risk of collision, except as provided in Rules 24 and 26, the power-driven 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*) A gun or other explosive signal fired at intervals of about a minute.

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

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

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

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

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

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

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

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

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

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

Rule 32

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

ST. LAWRENCE RIVER REGULATIONS

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

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

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

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

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

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

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

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

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

(*a*) near Pointe aux Trembles (en haut);

(*b*) at, between or near Varennes and Buoy 5-M St. Ours Traverse, except between Buoys 104-M and 116-M, and between Buoys 122-M and 124-M;

(*c*) in Lake St. Peter between the upper end of the St. Francis Bank and the English Bank;

(*d*) at or near Port St. Francis;

(*e*) at, between or near Batiscan and Cap Charles;

(*f*) in the dredged channel below Quebec known as Madame Reef-Brule Bank Channel, between Buoys 120½B and 112B, except between Buoys 114¼B 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 po of the compass, and so fixed as to throw the light from ri

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 dirction 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 exceding 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 desk 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 e000533 and properly placed bell, by striking the bell twice in

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

(*c*) a steam vessel with a raft in tow shall sound at intervals of not more than one minute a screeching or Modoc whistle for from three to five seconds;

(*d*) a sailing vessel when under way and not in tow shall sound on the foghorn, at intervals of not more than one minute, when on the starboard tack one blast, when on the port tack two blasts in succession, when with the wind abaft the beam three blasts in succession;

(*e*) a vessel at anchor and a vessel aground in or near a channel or fairway shall at intervals of not more than two minutes ring the bell rapidly for from three to five seconds and, in addition, at intervals of not more than three minutes shall sound on the whistle or horn a signal of one short blast, two long blasts, and one short blast in quick succession;

(*f*) a vessel of less than ten tons register tonnage, not being a steam vessel, shall not be obliged to give the signals prescribed by paragraphs (*a*) to (*e*), but if she does not she shall make some other efficient sound signal at intervals of not more than one minute;

(*g*) any vessel or raft not otherwise provided for in this rule, when under way, anchored or moored, and not in port, shall make an efficient sound signal at intervals of not more than one minute.

Speed of ships in fog

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

Steering and Sailing Rules

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

Sailing Vessels

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

(*a*) a vessel that is running free shall keep out of the way of a vessel that is closehauled;

(*b*) a vessel that is closehauled on the port tack shall keep out of the way of a vessel that is closehauled on the starboard tack;

(*c*) when both vessels are running free, with the wind on different sides, the vessel that has the wind on the port side shall keep out of the way of the other;

(*d*) when both vessels are running free, with the wind on the same side, the vessel that is to windward shall keep out of the way of the vessel that is to leeward.

Steam Vessels Meeting End On

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

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

Meeting in Rivers and Channels where there is a current

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

Steam Vessels Crossing

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

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

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

Steam and Sailing Vessels Approaching Each Other

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

Right of Way

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

Duty to slacken speed or stop

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

Overtaking Vessels

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

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

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

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

Narrow Channels

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

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

Signals indicating course

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

(2) Except as otherwise provided in these rules,

(*a*) one blast shall mean "I am directing my course to starboard"; and

(*b*) two blasts shall mean "I am directing my course to port".

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

Danger Signal

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

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

Cross Signals Prohibited

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

Approaching a short bend or curve in channel

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

Leaving a Dock or Berth

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

Special Circumstances

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

Neglect of Rules or Other Precautions

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

Unnecessary Sounding of Whistle

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

Distress Signals

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

(*a*) In the daytime:

(i) a gun or other explosive signal fired at intervals of about a minute;

(ii) the distant signal, consisting of a square flag, having either above or below it a ball or some object resembling a ball;

(iii) continuous sounding with any fog-signal apparatus.

(*b*) At night:

(i) a gun or other explosive signal fired at intervals of about a minute;

(ii) flames from the vessel (as from burning of a tarbarrel or oilbarrel);

(iii) rockets or shells, throwing stars of any colour or description, fired one at a time, at short intervals;

(iv) a continuous sounding with any fog-signal apparatus.

Bell and Whistle Signals Between Bridge and Engine Room

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

1 stroke or 1 blast (when engines are stopped)	Go Ahead
1 stroke or 1 blast (when engines are turning)	Stop
2 strokes or 2 blasts	Go Astern
3 strokes or 3 blasts	Slow
4 strokes or 4 blasts	Full Speed

2 strokes or 2 blasts shall always mean "Go astern", irrespective of other signals previously given.

Supplement

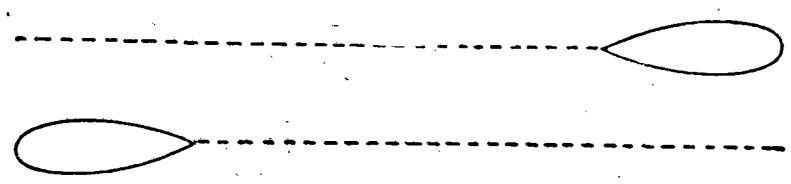
Diagrams

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

First Situation

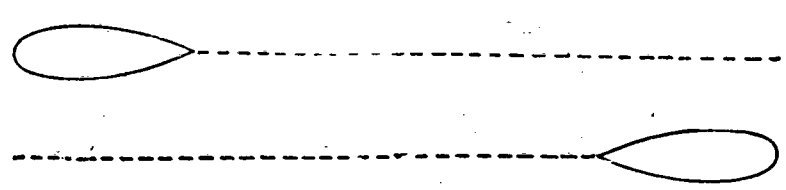
Here the two coloured lights visible to each will indicate their direct approach end on to each other. In this situation it is a standing rule that both shall direct their courses to starboard and pass on the port side of each other, each having previously given one distinct blast of the whistle.

Second Situation



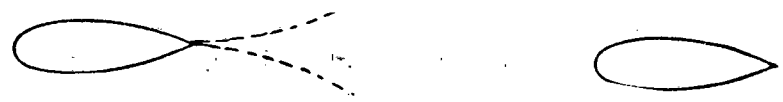
In this situation the red light only will be visible to each, the screens preventing the green lights from being seen. Both vessels are evidently passing to port of each other, which is permissible in this situation, each pilot having previously signified his intention by one distinct blast of the whistle.

Third Situation



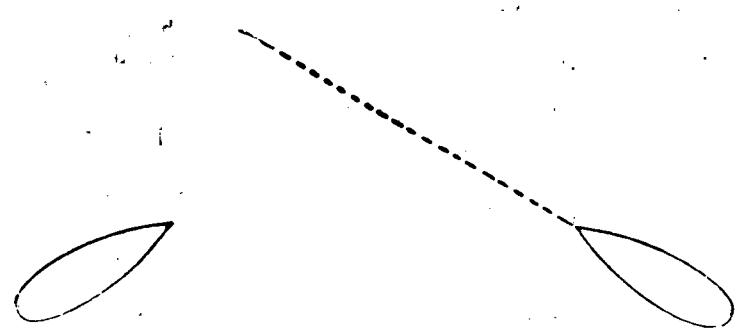
In this situation the green light only will be visible to each, the screens preventing the red light from being seen. They are therefore passing to starboard of each other, which is permissible in this situation, each pilot having previously signified his intention by two distinct blasts of the whistle.

Fourth Situation



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

Fifth Situation



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

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

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1963