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Spectrum Management and Telecommunications

Regulation by Reference

Technical Requirements for the Operation of Mobile Stations in the Maritime Service

Preface

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1. Scope

These are the technical requirements for the operation of mobile stations in the maritime service.

2. Definition

For the purpose of these requirements,

ship station means a mobile station, including a hand-held radio, that is installed or operated on board a ship or vessel; and

coast station means a fixed station that operates in the maritime service.

3. Use of Approved Radio Apparatus

The operator of a ship station shall operate radio apparatus that meets applicable standards.

4. Identification

The operator of a ship station shall identify the station using:

- (a) the call sign assigned by Industry Canada for that station if the radio station is licensed; or
- (b) the name of the ship or vessel; or
- (c) the Maritime Mobile Service Identities (MMSI) number with automated Digital Selective Calling (DSC).

5. Radionavigation Frequencies Allocated to the Maritime Service

The operator of a ship station shall operate radionavigation apparatus on those radio frequencies within the frequency bands set out in Column I of Schedule IV.

6. MF/HF Frequency Bands for Communications with Coast Stations and Other Ship Stations in the Maritime Service

6.1 Frequency Bands of Operation

The operator of a ship station shall operate within the frequency bands set out in Column I of Schedule II for ship-to-shore and ship-to-ship communications.

6.2 Frequency Usage

The operator of a ship station shall operate the radio apparatus in accordance with the usage set out in Column II of Schedule IV for the frequency band set out in Column I for that corresponding item.

6.3 Frequency Restrictions

- 6.3.1 The operator of a ship station shall operate the radio apparatus in accordance with the restrictions set out in Column III of Schedule IV for the frequency band set out in Column I for that corresponding item.
- 6.3.2 For the purpose of complying with the applicable restrictions in paragraph 6.3.1,
- (a) *Primary* means that a station operating in the maritime service can claim protection from harmful interference from a station performing a secondary service in that band.
 - (b) *Secondary* means that a station operating in the maritime service shall not:
 - (i) cause harmful interference to a station performing a primary or co-primary service; or
 - (ii) claim protection from a station performing a primary or co-primary service.
 - (c) *Co-primary* means that a station operating in the maritime service can claim protection from harmful interference from a station performing a secondary service in that band, and shall not cause harmful interference to a station performing another co-primary service.

6.4 Radio Apparatus Power Limitations in the Maritime Service

Subject to Section 9.2, the operator of a ship station operating within the frequency band set out in Column I of Schedule VI shall restrict the power output to that set out in Column II of that corresponding item.

7. Designated Frequencies, Maximum Power Output and Usage for the MF and HF Radiotelephony Allocations for Mobile Stations in the Maritime Service

7.1 Assigned Frequencies and Usage for the MF and HF Radiotelephony Allocations for Mobile Stations in the Maritime Service

The operator of a ship station shall operate the radio apparatus only on the designated radio frequencies set out in Column I of Schedule III.

7.2 Radio Apparatus Power Limitations in the Maritime Service for Specific MF and HF Frequencies

The operator of a ship station operating on a frequency in Column I of an item in Schedule VII shall restrict the power output to that set out in Column II of that item.

8. Frequencies, Nature of Service, Type of Traffic and Areas of Operation with Restrictions for the VHF Band in the Maritime Service

8.1 Channel and Frequencies

The operator of a ship station operating on a channel designation in Column I of Schedule I shall operate only on the transmit and receive frequencies listed in Column II.

8.2 Restrictions

For each channel, the operator of the ship station shall operate in accordance with:

- (a) the area of operation (see the legend for Schedule I) identified by the placement of an “X” in Column III;
- (b) the type of traffic (see the legend for Schedule I) listed in Column IV; and
- (c) the restrictions noted in Column V.

8.3 Power Restrictions

The operator of a ship station shall limit the power output to 25 watts for radio apparatus operating on the radio frequencies set out in Schedule I. While in port, to minimize interference to other users, operators shall reduce their power to 1 watt in accordance with the provisions of the *VHF Radiotelephone Practices and Procedures Regulations* made pursuant to the *Canada Shipping Act*.

9. Ultra High Frequency Allocations for Operations On Board a Ship Station

9.1 Frequencies of Operation

The operator of a ship station shall operate only on those radio frequencies set out in Column I of Schedule V.

9.2 Power Restrictions

The operator of a ship station shall limit the power output to 5 watts effective radiated power for radio apparatus operating on the radio frequencies set out in Schedule V.

9.3 Operating Restrictions

The operator of the ship station operating on the radio frequencies set out in Schedule V shall operate on a no-interference, no-protection basis. These frequencies are to be used for internal communication purposes, on board Canadian ships only, which are necessary for the support of operational requirements of the ships' business.

10. Frequencies Allocated to Ship Radiotelegraphy Stations Using Manual or Automatic A1AAN Morse in the Exclusive Maritime Mobile Bands Between 4 and 25 MHz

The operator of a ship station shall operate the radio apparatus only on the designated radio frequencies set out in Columns I and II of Schedule VIII.

Schedule I (Refer to Section 8) - Frequencies, Nature of Service, Type of Traffic and Area of Operation with Restrictions for the VHF Band in the Maritime Service

Column I Channel	Column II Frequencies (MHz)		Column III Area of Operation								Column IV Nature of Service & Type of Traffic	Column V Restrictions (Notes and Remarks) Refer to legend for abbreviations
	Ship Transmit	Ship Receive	EC	NL	AC	GL	WC	BCC	INLD BC	INLD PRA		
1	156.050	160.650						X			PC	
2	156.100	160.700						X			PC	
3	156.150	160.750						X	X		PC	
04A	156.200	156.200	X					X			IS, SS, C, S	DFO/Canadian Coast Guard only in BCC area. Commercial fishing in EC area.
05A	156.250	156.250	X	X	X	X	X	X	X		SM	
6	156.300	156.300	X	X	X	X	X	X	X	X	IS, C, NC, S	May be used for search and rescue communications between ships and aircraft.
07A	156.350	156.350	X	X	X	X	X	X	X		IS, SS, C	
8	156.400	156.400	X				X		X		IS, C, S	Also assigned for intership in the Lake Winnipeg area.
9	156.450	156.450			X			X		X	IS, SS, C, NC, S, SM	Commercial - BCC area. May be used to communicate with aircraft and helicopters in predominantly maritime support operations.
10	156.500	156.500			X	X		X			IS, SS, C, NC, S, SM	Commercial - BCC area. May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations.
11	156.550	156.550			X	X		X			IS, SS, C, NC, SM	VTS - BCC area. Also used for pilotage purposes.
12	156.600	156.600			X	X	X	X			IS, SS, C, NC, SM	VTS - BCC area. Port operations and pilot information and messages.
13	156.650	156.650	X	X	X	X	X	X	X		IS, C, NC, SM	VTS - BCC area. Bridge-to-bridge navigational traffic.
14	156.700	156.700			X	X		X			IS, SS, C, NC, SM	VTS - BCC area. Port operations and pilot information and messages.
15	156.750	156.750	X	X	X	X	X	X	X		IS, SS, C, NC, SM	Port operations and Ship Movement - BCC area. All operations limited to 1-watt maximum power. May also be used for on-board communications.
16	156.800	156.800	International Distress, Safety and Calling.								AA	
17	156.850	156.850	X	X	X	X	X	X	X		IS, SS, C, NC, SM	Port operations and Ship Movement - BCC area. All operations limited to 1 watt maximum power. May also be used for on board communications.

Column I Channel	Column II Frequencies (MHz)		Column III Area of Operation								Column IV Nature of Service & Type of Traffic	Column V Restrictions (Notes and Remarks) Refer to legend for abbreviations
	Ship Transmit	Ship Receive	EC	NL	AC	GL	WC	BCC	INLD BC	INLD PRA		
18A	156.900	156.900	X	X	X	X	X	X	X		IS, SS, C	Towing - BCC area.
19A	156.950	156.950	X	X	X	X	X	X	X	X	IS, SS	DFO/Canadian Coast Guard. Pacific Pilots - BCC area.
20	157.000	161.600	X	X	X	X	X	X	X		SS, S, SM	Port operations only with 1 watt maximum power.
21A	157.050	157.050	X	X	X	X	X	X	X	X	IS, SS	DFO/Canadian Coast Guard only.
21B	-----	161.650	X	X	X	X	X	X	X	X	S	Continuous Marine Broadcast (CMB) service.
22A	157.100	157.100	X	X	X	X	X	X	X	X	IS, SS, C, NC	For communications between Canadian Coast Guard and non-Canadian Coast Guard stations only.
23	157.150	161.750						X	X		SS, PC	
23B	-----	161.750				X					S	Continuous Marine Broadcast (CMB) service.
24	157.200	161.800	X	X	X	X	X	X	X	X	SS, PC	
25	157.250	161.850						X			SS, PC	Also assigned for operations in the Lake Winnipeg area.
25B	-----	161.850			X						S	Continuous Marine Broadcast (CMB) service.
26	157.300	161.900	X	X	X	X	X	X	X	X	S, PC	
27	157.350	161.950			X	X		X			SS, PC	
28	157.400	162.000						X			SS, S, PC	
28B	-----	162.000			X	X					S	Continuous Marine Broadcast (CMB) service.
60	156.025	160.625						X			SS, PC	
61A	156.075	156.075	X					X			IS, SS, C	DFO/Canadian Coast Guard only in BCC area. Commercial fishing only in EC area.
62A	156.125	156.125	X					X			IS, SS, C	DFO/Canadian Coast Guard only in BCC area. Commercial fishing only in EC area.
63A	156.175	156.175						X			IS, SS, C	Tow Boats - BCC area.
64	156.225	160.825						X			SS, PC	
64A	156.225	156.225	X								IS, SS, C	Commercial fishing only.
65A	156.275	156.275	X	X	X	X	X	X	X	X	S, IS, SS, C, NC	Search and rescue and antipollution operations on the Great Lakes. Towing on the Pacific Coast. Port operations only in the St. Lawrence River areas with 1 watt maximum power. Intership in INLD PRA.

Column I Channel	Column II Frequencies (MHz)		Column III Area of Operation								Column IV Nature of Service & Type of Traffic	Column V Restrictions (Notes and Remarks) Refer to legend for abbreviations
	Ship Transmit	Ship Receive	EC	NL	AC	GL	WC	BCC	INLD BC	INLD PRA		
66A	156.325	156.325	X	X	X	X	X	X	X		S, IS, SS, C, NC	Port operations only in the St. Lawrence River/Great Lakes areas with 1-watt maximum power. 1 watt marina channel -BCC area.
67	156.375	156.375	X	X	X	X	X	X	X	X	S, IS, SS, C, NC	May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations. Commercial fishing only in EC and INLD PRA areas. Pleasure craft -BCC area.
68	156.425	156.425	X	X	X	X	X	X	X	X	IS, SS, NC	For marinas, yacht clubs and pleasure craft.
69	156.475	156.475	X	X	X	X	X	X	X		IS, SS, C, NC	Commercial fishing only - EC area. Pleasure craft -BCC area.
70	156.525	156.525	Digital Selective Calling for Distress, Safety and Calling.									
71	156.575	156.575	X	X	X	X	X	X	X		S, IS, SS, SM, C, NC	Ship Movement - BCC area. Marinas and yacht clubs -EC and on Lake Winnipeg.
72	156.625	156.625	X					X			IS, C, NC	May be used to communicate with aircraft and helicopters in predominantly maritime support operations. Pleasure craft -BCC area.
73	156.675	156.675	X	X	X	X	X	X	X	X	S, IS, SS, C, NC	May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations. Commercial fishing only in EC and INLD PRA areas.
74	156.725	156.725	X					X			IS, SS, SM, C, NC	VTS and Ship Movement -BCC area.
75	156.775	156.775	X	X	X	X	X	X	X	X	IS, SS, SM, C	Simplex port operation, ship movement and navigation related communication only. 1 watt maximum.
76	156.825	156.825	X	X	X	X	X	X	X	X	IS, SS, SM, C	Simplex port operation, ship movement and navigation related communication only. 1 watt maximum.
77	156.875	156.875	X	X	X	X	X	X	X		S, IS, SS, SM	Pilotage - BCC area; 25 watts. Port operations only in the St. Lawrence River/Great Lakes areas with 1 watt maximum power.
78A	156.925	156.925	X					X			IS, SS, C	Fishing Industry -BCC area.
79A	156.975	156.975	X					X			IS, SS, C	Fishing Industry - BCC area.
80A	157.025	157.025	X					X			IS, SS, C	Whale Watching - BCC area.
81A	157.075	157.075	X	X	X	X	X	X	X		S, IS, SS	DFO/Canadian Coast Guard use only.
82A	157.125	157.125	X	X	X	X	X	X	X		IS, SS	DFO/Canadian Coast Guard use only.

Column I Channel	Column II Frequencies (MHz)		Column III Area of Operation								Column IV Nature of Service & Type of Traffic	Column V Restrictions (Notes and Remarks) Refer to legend for abbreviations
	Ship Transmit	Ship Receive	EC	NL	AC	GL	WC	BCC	INLD BC	INLD PRA		
83A	157.175	157.175	X					X			IS, SS	DFO/Canadian Coast Guard and other Government agencies.
83B	-----	161.775			X	X		X			S	Continuous Marine Broadcast (CMB) Service.
84	157.225	161.825						X			SS, PC	
85	157.275	161.875		X	X	X		X			SS, PC	
86	157.325	161.925						X			SS, PC	
87	157.375	157.375		X	X	X		X			IS, SM, NC	Port operation and ship movement -EC area. Pleasure craft -BCC area.
87B	161.975	161.975	X	X	X	X	X	X	X	X	-AIS-	Automatic Ship Identification and Surveillance System.
88	157.425	157.425		X	X	X		X			IS, SM, C	Port operation and ship movement - BCC area.
88B	162.025	162.025	X	X	X	X	X	X	X	X	-AIS-	Automatic Ship Identification and Surveillance System.
WX1	-----	162.550	X	X	X	X	X	X	X	X	S	Weatheradio Broadcast.
WX2	-----	162.400	X	X	X	X	X	X	X	X	S	Weatheradio Broadcast.
WX3	-----	162.475	X	X	X	X	X	X	X	X	S	Weatheradio Broadcast.

Note 1: Please refer to the Canadian Coast Guard publication *Radio Aids to Marine Navigation* (RAMN), for channels (frequencies) appropriate to your area of operation.

Note 2: For International Channel Designators please refer to Appendix 18 of the ITU *Radio Regulations*.

Legend (Schedule I)

Area of Operation:

AA:	All Areas
EC (East Coast):	NL, AC, GL and Eastern Arctic areas
NL:	Newfoundland and Labrador
AC:	Atlantic Coast, Gulf and St. Lawrence River up to and including Montréal
GL:	Great Lakes (including St. Lawrence above Montréal)
WC (West Coast):	BCC, Western Arctic and Athabasca-Mackenzie Watershed areas
BCC:	British Columbia Coast (Pacific Coast)
INLD BC:	Inland Waters of BC and the Yukon
INLD PRA:	Inland Waters of MB, SK, and AB

Nature of Service & Type of Traffic:

IS:	Intership
SS:	Ship/shore
C:	Commercial
NC:	Non-commercial
S:	Safety
SM:	Ship movement
PC:	Public correspondence
AIS:	Automatic Ship Identification and Surveillance System.
VTs:	Vessel Traffic Services

Channel Designations Explanation:

For example:

Designated ship station **Channel 01** transmits on 156.050 MHz and receives on 160.650 MHz, and is a **duplex** channel; and

Designated ship station **Channel 06** transmits on 156.300 MHz and receives on 156.300 MHz, and is a **Simplex** channel; and

Designated ship station channels with the “A” extension such as **Channel 04A** are generally **simplex** channels; however,

Designated ship station **Channels 87B and 88B** are **simplex** channels and for **AIS** purposes only; while designated ship station **Channels 21B, 23B, 25B, 28B, 83B, WX1, WX2 and WX3** are **receive only** channels for weather information.

Schedule II (Refer to Section 6) - MF/HF Bands for Communications with Coast Stations and Other Ship Stations in the Maritime Service

Item	Column I Frequency Band (MHz)	Column II Usage	Column III Restrictions
1	.415 - .495	COMMUNICATIONS (Radiotelegraphy only) (Narrow Band Direct Printing on .490 MHz receive only)	PRIMARY
2	.495 - .505	COMMUNICATIONS Distress & Calling (Radiotelegraphy only)	PRIMARY
3	.505 - .510	COMMUNICATIONS (Radiotelegraphy only)	PRIMARY
4	.510 - .525	NAVTEX RECEIVERS .518 MHz	CO-PRIMARY WITH AERONAUTICAL RADIONAVIGATION
5	2.000 - 2.065	COMMUNICATIONS	CO-PRIMARY WITH FIXED
6	2.065 - 2.107	COMMUNICATIONS	PRIMARY
7	2.107 - 2.170	COMMUNICATIONS	CO-PRIMARY WITH FIXED
8	2.1700 - 2.1735	COMMUNICATIONS	PRIMARY
9	2.1735 - 2.1905	COMMUNICATIONS Distress and Calling	PRIMARY
10	2.1905 - 2.1940	COMMUNICATIONS	PRIMARY
11	2.194 - 2.300	COMMUNICATIONS	CO-PRIMARY WITH FIXED
12	2.300 - 2.495	COMMUNICATIONS	CO-PRIMARY WITH FIXED
13	2.505 - 2.850	COMMUNICATIONS	CO-PRIMARY WITH FIXED
14	4.000 - 4.063	COMMUNICATIONS	CO-PRIMARY WITH FIXED
15	4.063 - 4.438	COMMUNICATIONS NavTex Receivers 4.2095 MHz	PRIMARY
16	5.73 - 5.90	COMMUNICATIONS	CO-PRIMARY WITH FIXED
17	6.200 - 6.525	COMMUNICATIONS	PRIMARY
18	8.100 - 8.195	COMMUNICATIONS	CO-PRIMARY WITH FIXED
19	8.195 - 8.815	COMMUNICATIONS	PRIMARY
20	12.230 - 13.200	COMMUNICATIONS	PRIMARY
21	16.36 - 17.41	COMMUNICATIONS	PRIMARY
22	18.78 - 18.90	COMMUNICATIONS	PRIMARY
23	19.68 - 19.80	COMMUNICATIONS	PRIMARY

Item	Column I Frequency Band (MHz)	Column II Usage	Column III Restrictions
24	22.000 - 22.855	COMMUNICATIONS	PRIMARY
25	25.07 - 25.21	COMMUNICATIONS	PRIMARY
26	26.100 - 26.175	COMMUNICATIONS	PRIMARY
27	216 - 220	COMMUNICATIONS	CO-PRIMARY WITH LAND MOBILE AND FIXED
28	2850 - 2900	MARINE RADAR - SHORE-BASED RADAR ONLY	MARITIME RADIONAVIGATION CO-PRIMARY WITH AERONAUTICAL RADIONAVIGATION secondary radiolocation
29	2900 - 3100	MARINE RADAR	PRIMARY secondary radiolocation
30	5470 - 5650	MARINE RADAR AND SHIPBOARD INTERROGATOR TRANSPONDER	PRIMARY secondary radiolocation
31	8850 - 9000	MARINE RADAR - SHORE-BASED RADAR ONLY	MARITIME RADIONAVIGATION CO-PRIMARY WITH RADIOLOCATION
32	9200 - 9300	MARINE RADAR & SEARCH AND RESCUE TRANSPONDERS	MARITIME RADIONAVIGATION CO-PRIMARY WITH RADIOLOCATION
33	9300 - 9500	SEARCH & RESCUE TRANSPONDERS RADAR	PRIMARY secondary radiolocation

Schedule III (Refer to Section 7.1) - Assigned Frequencies and Usage for the MF and HF Radiotelephony Allocations for Mobile Stations in the Maritime Service

Item	Column I Assigned Frequency (kHz)	Column II Usage
1	2004.4	Intership East Coast only
2	2041.4	Intership between pleasure vessels Pacific Coast only
3	2066.4	Private ship/shore communications in coastal areas of Canada and the St. Lawrence River as far west as Montréal
4	2080.4	Private ship/shore communications in coastal areas of Canada and the St. Lawrence River as far west as Montréal
5	2083.9	Intership communications in all maritime areas of Canada including the Great Lakes
6	2094.4	Private ship/shore communications in coastal areas of Canada and the St. Lawrence River as far west as Montréal
7	2101.4	Government use only
8	2104.9	Government use only
9	2174.5	International distress frequency, narrow band direct printing telegraphy
10	2182.0	Distress and Calling
11	2187.5	International Digital Selective Calling (DSC)
12	2238.4	Intership between non-fishing commercial vessels on the East Coast only
13	2314.4	Intership between fishing vessels on the Pacific Coast only
14	2367.4	Intership for non-fishing commercial and pleasure vessels on the Pacific Coast and Intership on the Beaufort Sea and Mackenzie Waterways
15	2639.4	Intership
16	2739.4	Intership
17	4126.4	Ship/shore calling only for distress, safety, calling and reply
18	4147.4	Ship/shore and intership communications
19	4150.4	Ship/shore and intership communications

Item	Column I Assigned Frequency (kHz)	Column II Usage
20	4177.5	International distress frequency, narrow band direct printing telegraphy
21	4207.5	International Digital Selective Calling (DSC)
22	4418.4	Call and reply
23	6216.4	Ship/shore calling only for distress, safety, calling and reply
24	6225.4	Ship/shore and intership communications
25	6228.4	Ship/shore and intership communications
26	6231.4	Ship/shore and intership communications
27	6268.0	International distress frequency, narrow band direct printing telegraphy
28	6312.0	International Digital Selective Calling (DSC)
29	6517.4	Call and reply. Daytime use only.
30	8256.4	Ship/shore calling only for distress, safety, calling and reply
31	8292.4	Distress and safety calling
32	8295.4	Ship/shore and intership communications
33	8298.4	Ship/shore and intership communications
34	8376.5	International distress frequency, narrow band direct printing telegraphy
35	8414.5	International Digital Selective Calling (DSC)
36	12291.4	Ship/shore calling only for distress, safety, calling and reply
37	12354.4	Ship/shore and intership communications
38	12357.4	Ship/shore and intership communications
39	12360.4	Ship/shore and intership communications
40	12363.4	Ship/shore and intership communications
41	12366.4	Ship/shore and intership communications
42	12520.0	International distress frequency, narrow band direct printing telegraphy

Item	Column I Assigned Frequency (kHz)	Column II Usage
43	12577.0	International Digital Selective Calling (DSC)
44	16421.4	Distress and safety calling
45	16529.4	Ship/shore and intership communications
46	16532.4	Ship/shore and intership communications
47	16535.4	Ship/shore and intership communications
48	16538.4	Ship/shore and intership communications
49	16541.4	Ship/shore and intership communications
50	16544.4	Ship/shore and intership communications
51	16547.4	Ship/shore and intership communications
52	16695.0	International distress frequency, narrow band direct printing telegraphy
53	18796.4	Distress and safety calling
54	18826.4	Ship/shore and intership communications
55	18829.4	Ship/shore and intership communications
56	18832.4	Ship/shore and intership communications
57	18835.4	Ship/shore and intership communications
58	18838.4	Ship/shore and intership communications
59	18841.4	Ship/shore and intership communications
60	18844.4	Ship/shore and intership communications
61	22061.4	Distress and safety calling
62	22160.4	Ship/shore and intership communications
63	22163.4	Ship/shore and intership communications
64	22166.4	Ship/shore and intership communications
65	22169.4	Ship/shore and intership communications
66	22172.4	Ship/shore and intership communications
67	22 175.4	Ship/shore and intership communications

Item	Column I Assigned Frequency (kHz)	Column II Usage
68	22178.4	Ship/shore and intership communications
69	25098.4	Distress and safety calling
70	25101.4	Ship/shore and intership communications
71	25104.4	Ship/shore and intership communications
72	25107.4	Ship/shore and intership communications
73	25110.4	Ship/shore and intership communications
74	25113.4	Ship/shore and intership communications
75	25116.4	Ship/shore and intership communications
76	25119.4	Ship/shore and intership communications

Note 1: Refer to Schedule VI for power limitations.

Note 2: Refer to Schedule VII for specific frequency power limitations.

Note 3: Assigned frequency is 1.4 kHz higher than the carrier frequency; for example (carrier frequency of 4125.0 kHz + 1.4 kHz = 4126.4 kHz, which is the assigned frequency).

Note 4: These frequencies are for simplex operation. However, they can be used for duplex operation by referring to the ITU *Radio Regulations*, Appendix 17, Part B, sub-sections A, B, C-1 and C-2.

**Schedule IV (Refer to Section 5) - Radionavigation Frequencies Allocated
to the Maritime Service**

Item	Column I Frequency Band (MHz)	Column II Usage	Column III Restrictions
1	.009 - .014	(Formerly OMEGA)	NONE
2	.014 - .01995	COMMUNICATIONS (Narrow band modes)	NONE
3	.02005 - .070	COMMUNICATIONS (Narrow band modes)	NONE
4	.070 - .090	COMMUNICATIONS (Narrow band modes)	NONE
5	.090 - .110	LORAN	NONE
6	.110 - .130	COMMUNICATIONS	NONE
7	.130 - .160	COMMUNICATIONS	NONE
8	.285 - .315	Automatic Direction Finding and Digital Global Positioning System	NONE
9	.315 - .325	Automatic Direction Finding and Digital Global Positioning System	NONE
10	.325 - .335	Automatic Direction Finding	NONE
11	.405 - .415	RADIO DIRECTION FINDING	NONE

Schedule V (Refer to Section 9) - Ultra High Frequency Allocations for Operations on Board a Ship Station

Item	Column I Frequency (MHz)	Column II Type of Use
1	457.525	COMMUNICATIONS ON BOARD SHIP
2	457.55	COMMUNICATIONS ON BOARD SHIP
3	457.575	COMMUNICATIONS ON BOARD SHIP
4	457.6	COMMUNICATIONS ON BOARD SHIP
5	467.525	COMMUNICATIONS ON BOARD SHIP
6	467.55	COMMUNICATIONS ON BOARD SHIP
7	467.575	COMMUNICATIONS ON BOARD SHIP
8	467.75	COMMUNICATIONS ON BOARD SHIP
9	467.775	COMMUNICATIONS ON BOARD SHIP
10	467.8	COMMUNICATIONS ON BOARD SHIP
11	467.825	COMMUNICATIONS ON BOARD SHIP

Note: These frequencies are to be used for **internal communication purposes only**, which are necessary for the support of operational requirements of the ship's business.

Note: Power output is limited to 5 watts on these frequencies.

Schedule VI (Refer to Section 6.4) - Radio Apparatus Power Limitations in the Maritime Service

Item	Column I Frequency Bands (MHz)	Column II Power Limitations
1	2.065 - 2.850	1.0 kilowatts (Peak Envelope Power)
2	4.000 - 4.438	1.5 kilowatts (Peak Envelope Power)
3	6.200 - 6.525	1.5 kilowatts (Peak Envelope Power)
4	8.100 - 8.815	1.5 kilowatts (Peak Envelope Power)
5	12.230 - 13.200	1.5 kilowatts (Peak Envelope Power)
6	16.360 - 17.410	1.5 kilowatts (Peak Envelope Power)
7	18.780 - 19.900	1.5 kilowatts (Peak Envelope Power)
8	22.000 - 22.855	1.5 kilowatts (Peak Envelope Power)
9	25.070 - 26.275	1.5 kilowatts (Peak Envelope Power)

Schedule VII (Refer to Section 7.2) - Radio Apparatus Power Limitations in the Maritime Service for Specific MF and HF Frequencies

Item	Column I Assigned Frequency (kHz)	Column II Maximum Power Peak Envelope Power Output
1	2 066.4	150 watts
2	2 080.4	150 watts
3	2 083.4	150 watts
4	2 094.4	150 watts
5	4 418.4	1 kW
6	6 216.4	1 kW
7	6 517.4	1 kW

Schedule VIII (Refer to Section 10.1) - Allocated HF Radiotelegraphy Frequencies for Mobile Stations in the Maritime Service

Item	Column I Working Frequency Bands (kHz)	Column II Calling/Replying Frequency Bands (kHz)
1	4187 - 4202 kHz, 31 frequencies, spaced 0.5 kHz	4182 - 4186.5 kHz, 10 frequencies, spaced 0.5 kHz Group 1: 4182 and 4182.5 kHz Common Channels: 4184 and 4184.5 kHz Group 3: 4185 and 4185.5 kHz
2	6285 - 6300 kHz, 31 frequencies, spaced 0.5 kHz	6276 - 6280.5 kHz, 10 frequencies, spaced 0.5 kHz Group 1: 6277 and 6277.5 kHz Common Channels: 6276 and 6276.5 kHz Group 3: 6279 and 6279.5 kHz
3	8342 - 8365.5 kHz, 48 frequencies, spaced 0.5 kHz 8371 - 8376 kHz, 11 frequencies, spaced 0.5 kHz	8366 - 8370.5 kHz, 10 frequencies, spaced 0.5 kHz Group 1: 8366 and 8366.5 kHz Common Channels: 8368 and 8369 kHz Group 3: 8368.5 and 8369.5 kHz
4	12422 - 12476.5 kHz, 110 frequencies, spaced 0.5 kHz	12550 - 12554.5 kHz, 10 frequencies, spaced 0.5 kHz Group 1: 12550 and 12550.5 kHz Common Channels: 12552 and 12553.5 kHz Group 3: 12552.5 and 12553 kHz
5	16619 - 16683 kHz, 129 frequencies, spaced 0.5 kHz	16734 - 16738.5 kHz, 10 frequencies, spaced 0.5 kHz Group 1: 16734 and 16734.5 kHz Common Channels: 16736 and 16738 kHz Group 3: 16736.5 and 16737 kHz
6	22242 - 22279 kHz, 75 frequencies, spaced 0.5 kHz	22279.5 - 22284 kHz, 10 frequencies, spaced 0.5 kHz Group 1: 22279.5 and 22280 kHz Common Channels: 22280.5 and 22281 kHz Group 3: 22282.5 and 22283 kHz
7	25161.5 - 25171 kHz, 20 frequencies, spaced 0.5 kHz	25171.5 - 25172.5 kHz, 3 frequencies, spaced 0.5 kHz Group 1: 25171.5 kHz Common Channels: 25172 kHz Group 3: 25172.5 kHz

Note 1: Group 1 includes Canada's West Coast and Western Arctic. Group 3 includes Canada's East Coast and Eastern Arctic.

Note 2: Please refer to the Canadian Coast Guard publication *Radio Aids to Marine Navigation* (RAMN), appropriate to the area of operation, for the specific calling and working frequencies for each area.