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# Canadian Modifications for the *Vessel Construction and Equipment Regulations*

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## TABLE OF CONTENTS

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<b>PART 1:</b>	<b>SOLAS REGULATIONS.....</b>	<b>1</b>
<b>CHAPTER I</b>	<b>General provisions .....</b>	<b>1</b>
<b>CHAPTER II-1</b>	<b>Construction – Structure, subdivision and stability, machinery and electrical installations.....</b>	<b>1</b>
<b>Part A</b>	<b>General</b>	<b>1</b>
Regulation 1	Application .....	1
Regulation 2	Definitions .....	1
Regulation 3	Definitions relating to parts C, D and E.....	1
<b>Part A-1</b>	<b>Structure of ships</b>	<b>2</b>
Regulation 3-1	Structural, mechanical, and electrical requirements for ships .....	2
Regulation 3-2	Protective coatings of dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers .....	2
Regulation 3-3	Safe access to tanker bows.....	2
Regulation 3-4	Emergency towing arrangements and procedures .....	2
Regulation 3-5	New installation of materials containing asbestos .....	2
Regulation 3-6	Access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers .....	2
Regulation 3-7	Construction drawings maintained on board and ashore .....	3
Regulation 3-8	Towing and mooring equipment.....	3
Regulation 3-9	Means of embarkation on and disembarkation from ships .....	3
Regulation 3-10	Goal-based ship construction standards for bulk carriers and oil tankers.....	3
Regulation 3-11	Corrosion protection of cargo oil tanks of crude oil tankers.....	3
Regulation 3-12	Protection against noise .....	3
Regulation 3-13	Lifting appliances and anchor handling winches.....	4
<b>Part B</b>	<b>Subdivision and stability</b>	<b>4</b>
Regulation 4	General.....	4
<b>Part B-1</b>	<b>Stability</b>	<b>4</b>
Regulation 5	Intact Stability.....	4
Regulation 5-1	Stability information to be supplied to the master .....	5
Regulation 6	Required subdivision index R.....	5
Regulation 7	Attained subdivision index A .....	5
Regulation 7-1	Calculation of the factor $p_i$ .....	5
Regulation 7-2	Calculation of the factor $s_i$ .....	5
Regulation 7-3	Permeability .....	5

Regulation 8	Special requirements concerning passenger ship stability .....	5
Regulation 8-1	System capabilities and operational information after a flooding casualty on passenger ships .....	6
<b>Part B-2</b>	<b>Subdivision, watertight and weathertight integrity</b>	<b>6</b>
Regulation 9	Double bottoms in passenger ships and cargo ships other than tankers .....	6
Regulation 10	Construction of watertight bulkheads .....	6
Regulation 11	Initial testing of watertight bulkheads, etc. ....	6
Regulation 12	Peak and machinery space bulkheads, shaft tunnels, etc. ....	6
Regulation 13	Openings in watertight bulkheads below the bulkhead deck in passenger ships ...	6
Regulation 13-1	Openings in watertight bulkheads and internal decks in cargo ships .....	7
Regulation 14	Passenger ships carrying goods vehicles and accompanying personnel .....	7
Regulation 15	Openings in the shell plating below the bulkhead deck of passenger ships and the freeboard deck of cargo ships .....	8
Regulation 15-1	External openings in cargo ships .....	8
Regulation 16	Construction and initial tests of watertight closures .....	8
Regulation 16-1	Construction and initial tests of watertight decks, trunks, etc. ....	8
Regulation 17	Internal watertight integrity of passenger ships above the bulkhead deck.....	8
Regulation 17-1	Integrity of the hull and superstructure, damage prevention and control on ro-ro passenger ships .....	8
<b>Part B-3</b>	<b>Subdivision load line assignment for passenger ships</b>	<b>9</b>
Regulation 18	Assigning, marking and recording of subdivision load lines for passenger ships .	9
<b>Part B-4</b>	<b>Stability management</b>	<b>9</b>
Regulation 19	Damage control information.....	9
Regulation 19-1	Damage control drills for passenger ships .....	9
Regulation 20	Loading of ships.....	9
Regulation 21	Periodical operation and inspection of watertight doors, etc., in passenger ships .	9
Regulation 22	Prevention and control of water ingress, etc. ....	9
Regulation 22-1	Flooding detection systems for passenger ships carrying 36 or more persons .....	9
Regulation 23	Special requirements for ro-ro passenger ships .....	10
Regulation 24	Additional requirements for prevention and control of water ingress, etc., in cargo ships .....	10
Regulation 25	Water level detectors on single multiple cargo ships other than bulk carriers.....	10
Regulation 25-1	Water level detectors on multiple hold cargo ships other than bulk carriers and tankers.....	10
<b>Part C</b>	<b>Machinery installations</b>	<b>10</b>
Regulation 26	General.....	10
Regulation 27	Machinery .....	11

Regulation 28	Means of going astern.....	11
Regulation 29	Steering gear .....	11
Regulation 30	Additional requirements for electric and electrohydraulic steering gear .....	11
Regulation 31	Machinery controls .....	11
Regulation 32	Steam boilers and boiler feed systems .....	12
Regulation 33	Steam pipe systems.....	12
Regulation 34	Air pressure systems .....	12
Regulation 35	Ventilating systems in machinery spaces .....	12
Regulation 35-1	Bilge pumping arrangements .....	12
Regulation 36	[Blank] .....	13
Regulation 37	Communication between navigation bridge and machinery space .....	13
Regulation 38	Engineers' alarm.....	13
Regulation 39	Location of emergency installations in passenger ships .....	13
<b>Part D</b>	<b>Electrical installations</b>	<b>13</b>
Regulation 40	General.....	13
Regulation 41	Main source of electrical power and lighting systems .....	14
Regulation 42	Emergency source of electrical power in passenger ships.....	14
Regulation 42-1	Supplementary emergency lighting for ro-ro passenger ships.....	15
Regulation 43	Emergency source of electrical power in cargo ships.....	15
Regulation 44	Starting arrangements for emergency generating sets .....	16
Regulation 45	Precautions against shock, fire and other hazards of electrical origin .....	16
<b>Part E</b>	<b>Additional requirements for periodically unattended machinery spaces</b>	<b>16</b>
Regulation 46	General.....	16
Regulation 47	Fire precautions.....	16
Regulation 48	Protection against flooding .....	16
Regulation 49	Control of propulsion machinery from the navigation bridge .....	16
Regulation 50	Communication.....	17
Regulation 51	Alarm system .....	17
Regulation 52	Safety systems.....	17
Regulation 53	Special requirements for machinery, boiler and electrical installations .....	17
Regulation 54	Special consideration in respect of passenger ships .....	17
<b>Part F</b>	<b>Alternative design and arrangements</b>	<b>17</b>
Regulation 55	Alternative design and arrangements.....	17
<b>Part G</b>	<b>Ships using low-flashpoint fuels</b>	<b>17</b>
Regulation 56	Application .....	17

Regulation 57	Requirements for ships using low-flashpoint fuels.....	17
<b>CHAPTER II-2</b>	<b>Construction – Fire protection, fire detection and fire extinction.....</b>	<b>18</b>
<b>CHAPTER III</b>	<b>Life-saving appliances and arrangements .....</b>	<b>18</b>
<b>Part A</b>	<b>General</b>	<b>18</b>
Regulation 1	Application .....	18
Regulation 2	Exemptions .....	18
Regulation 3	Definitions .....	19
Regulation 4	Evaluation, testing and approval of life-saving appliances and arrangements ...	20
Regulation 5	Production tests.....	20
<b>Part B</b>	<b>Requirements for ships and life-saving appliances</b>	<b>21</b>
Regulation 6	Communications .....	21
Table 1:	Flare carriage requirements .....	22
Regulation 7	Personal life-saving appliances.....	22
Table 2:	Lifebuoy carriage requirements .....	24
Regulation 8	Muster list and emergency instructions .....	26
Regulation 9	Operating instructions.....	26
Regulation 10	Manning of survival craft and supervision .....	26
Regulation 11	Survival craft muster and embarkation arrangements.....	26
Regulation 12	Launching stations .....	27
Regulation 13	Stowage of survival craft .....	27
Regulation 14	Stowage of rescue boats.....	27
Regulation 15	Stowage of marine evacuation systems .....	27
Regulation 16	Survival craft launching and recovery arrangements.....	28
Regulation 17	Rescue boat embarkation, launching and recovery arrangements .....	28
Regulation 17-1	Recovery of persons from the water .....	28
Regulation 18	Line-throwing appliances .....	28
Regulation 19	Emergency training and drills.....	28
Regulation 20	Operational readiness, maintenance and inspections .....	29
Regulation 21	Survival craft and rescue boats .....	29
Table 3:	Passenger vessel survival craft carriage requirements .....	32
Regulation 22	Personal life-saving appliances.....	33
Regulation 23	Survival craft and rescue boat embarkation arrangements .....	33
Regulation 24	Stowage of survival craft .....	34
Regulation 25	Muster stations.....	34
Regulation 26	Additional requirements for ro-ro passenger ships.....	34

Regulation 27	Information on passengers .....	34
Regulation 28	Helicopter landing and pick-up areas .....	35
Regulation 29	Decision support system for masters of passenger ships .....	35
Regulation 30	Drills .....	35
Regulation 31	Survival craft and rescue boats .....	35
Table 4:	Cargo vessels survival craft carriage requirements .....	38
Regulation 32	Personal life-saving appliances .....	38
Regulation 33	Survival craft embarkation and launching arrangements .....	39
Regulation 34	[untitled] .....	39
Regulation 35	Training manual and on-board training aids .....	39
Regulation 36	Instructions for on-board maintenance .....	39
Regulation 37	Muster list and emergency instructions .....	39
<b>Part C</b>	<b>Alternative design and arrangements</b>	<b>39</b>
Regulation 38	Alternative design and arrangements .....	39
<b>CHAPTER IV</b>	<b>Radiocommunications .....</b>	<b>40</b>
<b>CHAPTER V</b>	<b>Safety of navigation .....</b>	<b>40</b>
<b>CHAPTER VI</b>	<b>Carriage of cargoes and oil fuels .....</b>	<b>40</b>
<b>CHAPTER VII</b>	<b>Carriage of dangerous goods .....</b>	<b>40</b>
<b>CHAPTER VIII</b>	<b>Nuclear ships .....</b>	<b>40</b>
<b>CHAPTER IX</b>	<b>Management for the safe operation of ships .....</b>	<b>40</b>
<b>CHAPTER X</b>	<b>Safety measures for high-speed craft .....</b>	<b>40</b>
<b>CHAPTER XI-1</b>	<b>Special measures to enhance maritime safety .....</b>	<b>40</b>
<b>CHAPTER XI-2</b>	<b>Special measures to enhance maritime security .....</b>	<b>41</b>
<b>CHAPTER XII</b>	<b>Additional safety measures for bulk carriers .....</b>	<b>41</b>
<b>CHAPTER XIII</b>	<b>Verification of compliance .....</b>	<b>41</b>
<b>CHAPTER XIV</b>	<b>Safety measures for ships operating in polar waters .....</b>	<b>41</b>
<b>CHAPTER XV</b>	<b>Safety measures for ships carrying industrial personnel .....</b>	<b>41</b>
<b>PART 2:</b>	<b>CREW ACCOMMODATION SPACES AND RECREATIONAL FACILITIES .....</b>	<b>42</b>
Regulation 3.1 –	Accommodation and recreational facilities .....	42
Standard A3.1 –	Accommodation and recreational facilities .....	42
Guideline B3.1.1 –	Design and construction .....	44
Guideline B3.1.2 –	Ventilation .....	44
Guideline B3.1.3 –	Heating .....	46
Guideline B3.1.4 –	Lighting .....	46



Guideline B3.1.5 – Sleeping rooms.....	48
Guideline B3.1.6 – Mess rooms .....	49
Guideline B3.1.7 – Sanitary accommodation.....	50
Guideline B3.1.8 – Hospital accommodation.....	51
Guideline B3.1.9 – Other facilities.....	51
Guideline B3.1.11 – Recreational facilities, mail and ship visit arrangements .....	51
Guideline B3.1.12 – Prevention of noise and vibration .....	51
<b>PART 3:                    ADDITIONAL REQUIREMENTS.....</b>	<b>52</b>
<b>ANNEX 1:                SEA ICE AREAS OF EASTERN CANADA .....</b>	<b>53</b>

**NOTICE**

Information in a text box is for information only and does not form part of the Standard.

To ensure compliance, it is the responsibility of the reader to consult the official instrument referred to in the text box.

**PART 1: SOLAS REGULATIONS****CHAPTER I General provisions**

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**Information Note:** Chapter I is not incorporated. Refer to the *Vessel Safety Certificate Regulations* and TP 15456 - *Canadian Vessel Plan Approval and Inspection Standard*.

**CHAPTER II-1 Construction – Structure, subdivision and stability, machinery and electrical installations****Part A General**

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**Regulation 1 Application**

No modification.

**Regulation 2 Definitions**

- 1 In addition to the definitions in regulation 2, the following definitions apply in this Standard:

“*fresh water*” means, for the purpose of this Standard, all the rivers, lakes, and other navigable fresh waters in Canada, and includes the St. Lawrence River, west of the eastern end of the Île d’Orléans. (*eau douce*)

“*FTP Code*” means the International Code for Application of Fire Test Procedures, published by the IMO. (“*fresh water*” means all the rivers, lakes, and other navigable fresh waters in Canada. This includes the St. Lawrence River, west of the eastern end of the Île d’Orléans. *Recueil FTP*)

“*near coastal voyage, Class 1*” has the same meaning as in Section 1 of the *Vessel Safety Certificate Regulations*. (*voyage à proximité du littoral, classe 1*)

“*VCER*” means the *Vessel Construction and Equipment Regulations*. (*RCEB*)

**Regulation 3 Definitions relating to parts C, D and E**

No modification.

## **Part A-1 Structure of ships**

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### ***Regulation 3-1 Structural, mechanical, and electrical requirements for ships***

- 1 In addition to the requirements of regulation 3-1, the structure of a passenger vessel of more than 40 m in length that is registered in Canada or engaged in the coasting trade of Canada, when operating in the sea ice areas of eastern Canada referenced in Annex 1, must be designed to resist both global and local structural loads anticipated under the foreseen ice conditions.
- 2 An appropriate design of hull scantlings must be selected based on the intended operational profile for the vessel. When establishing procedures or operational limitations, local environmental conditions, including operations in ice, must be considered.

### ***Regulation 3-2 Protective coatings of dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers***

- 1 Regulation 3-2 does not apply to a vessel operating in fresh water for a period of at least three consecutive months annually.

### ***Regulation 3-3 Safe access to tanker bows***

No modification.

### ***Regulation 3-4 Emergency towing arrangements and procedures***

No modification.

**Information Note:** Regulation 3-4.2 applies to a grandfathered vessel on the first anniversary of the day the VCER came into force (refer to Section 10 of the VCER).

### ***Regulation 3-5 New installation of materials containing asbestos***

No modification.

### ***Regulation 3-6 Access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers***

No modification.

**Regulation 3-7 Construction drawings maintained on board and ashore**

- 1 A vessel that is not a Safety Convention vessel does not need to comply with the requirements of regulation 3-7.

**Regulation 3-8 Towing and mooring equipment**

**Information Note:** Regulation 3-8 applies to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

- 1 In addition to the requirements of regulation 3-8, a vessel must be equipped with anchoring equipment that complies with the requirements of a recognized organization.

**Regulation 3-9 Means of embarkation on and disembarkation from ships**

- 1 Regulation 3-9 does not apply to a vessel that is not a Safety Convention vessel.

**Information Note:** A vessel fitted with means of embarkation must comply with the requirements of the *Cargo, Fumigation and Tackle Regulations*.

**Regulation 3-10 Goal-based ship construction standards for bulk carriers and oil tankers**

No modification.

**Regulation 3-11 Corrosion protection of cargo oil tanks of crude oil tankers**

No modification.

**Regulation 3-12 Protection against noise**

No modification.

**Regulation 3-13 Lifting appliances and anchor handling winches**

**Information Note:** For the purpose of implementation of regulation II-1/3-13, which comes into force on 1 January 2026, the load-handling equipment that is subject to and compliant with the requirements of Part 3 (Tackle) of the *Cargo, Fumigation and Tackle Regulations* is deemed compliant with the respective requirements of the VCER.

No modification.

**Part B Subdivision and stability**

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**Regulation 4 General**

No modification.

**Part B-1 Stability**

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**Regulation 5 Intact Stability**

**Information Note:** Regulation 5 applies to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

The recommendations set out in part B of the 2008 IS Code are mandatory, and the 2008 IS Code must be read in conjunction with TP 7301 *Canadian Modifications to the International Code on Intact Stability, 2008* (refer to Section 101 of the VCER).

- 1 Regulation 5.2 applies to a cargo vessel or a passenger vessel that is not a Safety Convention vessel.
- 2 A vessel of barge type hull form that does not have a mechanical means of propulsion or a vessel of barge type hull form operated on a cable is not required to undergo an inclining experiment if it complies with following conditions:
  - (1) the superstructure, as defined in the *Load Line Regulations*, and deck houses, together in single tier, do not extend to more than 30% of the length of the vessel;
  - (2) there is no heavy machinery, other than the cable ferry mechanism, on the deck;
  - (3) the vertical centre of gravity (VCG) of the lightship must be assumed at the main deck level. A lesser value could be acceptable if documented by a detailed weight calculation, with an additional margin of 10% of the depth;

- (4) the lightship displacement and longitudinal centre of gravity (LCG) are determined based on a lightship survey.

***Regulation 5-1 Stability information to be supplied to the master***

**Information Note:** Regulation 5-1 applies to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

No modification.

***Regulation 6 Required subdivision index R***

**Information Note:** A passenger vessel that is not a Safety Convention vessel may comply with TP 10943 *Damage Stability Standards for Non-Convention Passenger Vessels*, instead of regulations 6 to 8 of Chapter II-1 of SOLAS (refer to Section 102 of the VCER).

No modification.

***Regulation 7 Attained subdivision index A***

No modification.

***Regulation 7-1 Calculation of the factor  $p_i$***

No modification.

***Regulation 7-2 Calculation of the factor  $s_i$***

No modification.

***Regulation 7-3 Permeability***

No modification.

***Regulation 8 Special requirements concerning passenger ship stability***

No modification.

**Regulation 8-1** *System capabilities and operational information after a flooding casualty on passenger ships*

- 1 Regulation 8-1 does not apply to a passenger vessel that is not a Safety Convention vessel operating within the limits of a near coastal voyage, Class 2.

**Part B-2** *Subdivision, watertight and weathertight integrity*

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**Regulation 9** *Double bottoms in passenger ships and cargo ships other than tankers*

**Information Note:** Regulation 9 does not apply to a non-Safety Convention cargo vessel, other than a tanker, that is less than 500 gross tonnage. (Refer to paragraph 100(1)(c) of the VCER.)

Refer to the *Vessel Pollution and Dangerous Chemicals Regulations* for double bottom requirements applicable to vessels carrying oil or a chemical.

- 1 For the purpose of regulation 9, a double bottom does not need to be fitted on a cable ferry.

**Regulation 10** *Construction of watertight bulkheads*

No modification.

**Regulation 11** *Initial testing of watertight bulkheads, etc.*

No modification.

**Regulation 12** *Peak and machinery space bulkheads, shaft tunnels, etc.*

No modification.

**Regulation 13** *Openings in watertight bulkheads below the bulkhead deck in passenger ships*

- 1 On a vessel that operates on inland waters of Canada, other than the Great Lakes, hinged quick-acting watertight doors can be installed within accommodation and working spaces, other than machinery spaces, instead of complying with regulations 13.5.1 to 13.8.3, if it is possible to keep such doors closed at all times except when being used for transit through the door.
- 2 Hinged watertight doors must:
  - (1) comply with regulation 13.9.1;

- (2) maintain the watertightness and strength of the bulkhead where they are fitted; and
  - (3) be designed so they close with means other than gravity or dropping weight and they must be operable from each side of the bulkhead where they are fitted.
- 3 If the audible (sounding) alarm required by regulation 13.7.1.6 cannot be heard on both sides of an open door, an audible alarm must be fitted on each side of, and next to, the watertight door.
- 4 Watertight doors must be kept closed during navigation to ensure the watertight integrity, but they can be used while at sea, except as provided in regulations 13.9.1 or 14. They must also include a notice “To be kept closed at sea” in the working language of the vessel, on each side of the bulkhead and a notice to this effect must be posted in the navigation bridge.

***Regulation 13-1 Openings in watertight bulkheads and internal decks in cargo ships***

- 1 On a cargo vessel that is not a Safety Convention vessel, hinged quick-acting watertight doors can be installed as an alternative to complying with regulation 13-1.2.
- 2 The hinged watertight doors must:
  - (1) comply with regulation 13.9.1;
  - (2) maintain the watertightness and strength of the bulkhead where they are fitted; and
  - (3) be designed so they close with means other than gravity or dropping weight and they must be operable from each side of the bulkhead where they are fitted;
- 3 If the audible (sounding) alarm required by regulation 13-1.2 cannot be heard on both sides of an open door, an audible alarm must be fitted on each side of, and next to, the watertight door.
- 4 Watertight doors must be kept closed during navigation to ensure the watertight integrity, but they can be used while at sea, except as provided in regulations 13-1.4 and 13-1.5. They must also include a notice “To be kept closed at sea” in the working language of the vessel, on each side of the bulkhead and a notice to this effect must be posted in the navigation bridge.

***Regulation 14 Passenger ships carrying goods vehicles and accompanying personnel***

No modification.



**Regulation 15**      ***Openings in the shell plating below the bulkhead deck of passenger ships and the freeboard deck of cargo ships***

- 1 In addition to the requirements of regulation 15.8.3, the authorized representative of a vessel that navigates in frazil ice or ice slush conditions must ensure that the requirements for the design and construction of sea inlets set out in the annex to IMO Circular MSC/Circ.504, *Guidance on design and construction of sea inlets under slush ice conditions*, as amended from time to time, are complied with or that other means are used to prevent frazil ice or ice slush from blocking sea inlets.

**Regulation 15-1**    ***External openings in cargo ships***

- 1 In addition to the requirement of regulation 15-1.3, control positions must include a system of warning indicator lights. The system must confirm that the doors are fully closed, secured and locked. This system must be “fail-safe” so that in the event of a fault, the system cannot incorrectly indicate that the doors are fully closed, secured and locked.

**Regulation 16**      ***Construction and initial tests of watertight closures***

No modification.

**Regulation 16-1**    ***Construction and initial tests of watertight decks, trunks, etc.***

No modification.

**Regulation 17**      ***Internal watertight integrity of passenger ships above the bulkhead deck***

No modification.

**Regulation 17-1**    ***Integrity of the hull and superstructure, damage prevention and control on ro-ro passenger ships***

- 1 Regulation 17-1.1.1 does not apply to a ro-ro passenger vessel that is not a Safety Convention vessel and that operates within the limits of a near coastal voyage, Class 2, an inland voyage, or a sheltered waters voyage if the accesses that lead to spaces below the bulkhead deck:
  - (1) are made weathertight, alarmed and indicated to the navigation bridge; and
  - (2) are monitored “closed” by deck patrols while the vessel is underway.

### **Part B-3 Subdivision load line assignment for passenger ships**

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#### ***Regulation 18 Assigning, marking and recording of subdivision load lines for passenger ships***

- 1 For the purpose of regulation 18.2, for a passenger vessel that is not a Safety Convention vessel P1, P2, etc. must be read as C1, C2, etc.
- 2 For the purpose of regulations 18.2 and 18.4, for a passenger vessel that is not a Safety Convention vessel the expression “Passenger Ship Safety Certificate” must be read as “Safety Inspection Certificate”.
- 3 For the purpose of regulations 18.5 and 18.7, for a vessel that engages exclusively on fresh water voyages and a vessel holding a Great Lakes and Inland Waters of Canada Load Line Certificate the expression “salt water” must be read as “fresh water”.

### **Part B-4 Stability management**

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#### ***Regulation 19 Damage control information***

No modification.

#### ***Regulation 19-1 Damage control drills for passenger ships***

<b>Information Note:</b> Regulation 19-1 is not incorporated.
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#### ***Regulation 20 Loading of ships***

No modification.

#### ***Regulation 21 Periodical operation and inspection of watertight doors, etc., in passenger ships***

No modification.

#### ***Regulation 22 Prevention and control of water ingress, etc.***

- 1 For the purpose of regulation 22.3, the Administration must be read as the Marine Technical Review Board.

#### ***Regulation 22-1 Flooding detection systems for passenger ships carrying 36 or more persons***

No modification.

**Regulation 23**     ***Special requirements for ro-ro passenger ships***

- 1 Regulation 23.9 does not apply when passengers are directed to return to their vehicles before the vessel docks.

**Regulation 24**     ***Additional requirements for prevention and control of water ingress, etc., in cargo ships***

No modification.

**Regulation 25**     ***Water level detectors on single multiple cargo ships other than bulk carriers***

No modification.

**Regulation 25-1**     ***Water level detectors on multiple hold cargo ships other than bulk carriers and tankers***

No modification.

**Part C**     **Machinery installations**

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**Regulation 26**     ***General***

- 1 The following machinery and equipment must be type approved by a recognized organization or a product certification body to be installed on a vessel:
  - (1) reciprocating engines (internal combustion and steam);
  - (2) turbine engines (gas and steam);
  - (3) reversing and reduction gearing;
  - (4) steam boilers;
  - (5) unfired pressure vessels;
  - (6) batteries and electrical propulsion installations.
- 2 In addition to the requirements of regulation 26, a vessel's electric propulsion system that consists of batteries and an electric propulsion motor must comply with the following:
  - (1) only equipment associated with the batteries can be placed within the battery space;
  - (2) the battery space must comply with the applicable requirements of the *Vessel Fire Safety Regulations* for machinery spaces of category A;

- (3) the battery space must be secured against external heat effects by A-60 insulation against other machinery spaces of category A and other spaces that present a high or moderate fire risk;
- (4) the supply and exhaust ventilation system for the battery space must be independent from other spaces and exhaust to open air must occur in a safe place;
- (5) the battery space and ventilation system/ducts must be equipped with a gas detection system;
- (6) the battery space must be equipped with a fixed fire-extinguishing system of a type that has due regard to the fire growth potential;
- (7) a risk analysis for the installation must be drawn up according to MSC.1/Circ.1455, based on the specific installation; and
- (8) Risk Control Options (RCO) identified in the risk analysis must be implemented to reduce the identified risks to the As Low As Reasonably Practical.

***Regulation 27 Machinery***

No modification.

***Regulation 28 Means of going astern***

No modification.

***Regulation 29 Steering gear***

- 1 Regulation 29 does not apply to cable ferries.
- 2 For the purpose of regulation 29.1, an auxiliary steering gear is not required for a double-ended vessel with two independent steering systems, one fore and one aft, both of which are available during navigation, as long as the corresponding rudder can be safely and speedily brought back to the centre line and kept steady in that position should one of the steering systems fail.

***Regulation 30 Additional requirements for electric and electrohydraulic steering gear***

No modification.

***Regulation 31 Machinery controls***

No modification.

**Regulation 32**     ***Steam boilers and boiler feed systems***

No modification.

**Regulation 33**     ***Steam pipe systems***

No modification.

**Regulation 34**     ***Air pressure systems***

No modification.

**Regulation 35**     ***Ventilating systems in machinery spaces***

No modification.

**Regulation 35-1**   ***Bilge pumping arrangements***

- 1 For the purpose of regulation 35-1.3, a passenger vessel of less than 91.5 m that is not a Safety Convention vessel and that operates within the limits of a near coastal voyage, Class 2, may reduce the number of pumps by one.
- 2 A passenger vessel that operates in the sea ice areas of eastern Canada referenced in Annex 1 must be fitted with bilge alarms in all unmanned dry compartments, accommodations and machinery spaces below the bulkhead deck. These must have indicators in the wheelhouse and sounding pipes that are readily accessible from the bulkhead deck or higher deck.
- 3 For the purpose of regulation 35-1.4, a passenger vessel operating on sheltered water voyages and a cargo vessel that is not a Safety Convention vessel operating within the limits of near coastal voyages, Class 2, must comply with the following:
  - (1) every power bilge pump must be capable of pumping water through the main bilge pipe at a rate of at least 2 m/s;
  - (2) have at least two power pumps connected to the main bilge system, one of which may be driven by the propulsion machinery;
  - (3) two power pumps that operate together can be used instead of one power pump, as long as the pumps have a combined capacity at least equivalent to a single power pump; and
  - (4) the diameter of the bilge main pipe must be calculated with the formula in regulation 35-1.3.9.

**Regulation 36\*** *[Blank]***Regulation 37** *Communication between navigation bridge and machinery space*

No modification.

**Regulation 38** *Engineers' alarm*

No modification.

**Regulation 39** *Location of emergency installations in passenger ships*

No modification.

**Part D** **Electrical installations**

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**Regulation 40** *General***Approvals**

- 1 Except as provided in regulation 40.1.2, electrical equipment, including appliances, accessories and fittings, must be approved for marine use by a recognized organization or a Product Certification Body as meeting the rule, code or Standard under which it is designed. It must also have the identification mark of the testing laboratory or Product Certification Body.
- 2 Electrical equipment bearing the CE marking indicating that it meets the applicable requirements of Directive 2014/35/EU of the European Parliament and of the Council supported by the Guidelines on the application of the Directive ([https://ec.europa.eu/growth/sectors/electrical-engineering/lvd-directive\\_en](https://ec.europa.eu/growth/sectors/electrical-engineering/lvd-directive_en)) is acceptable. The EU Declaration of Conformity for the equipment, in the working language of the vessel, must be presented to Transport Canada or the recognized organization to which the vessel is delegated on request.
- 3 Marine electrical cable that is type approved or listed by a product certification body as meeting the Standards for shipboard or offshore marine use, developed by the Standards development organizations listed below, may be installed on board Canadian vessels:
  - (1) International Electrotechnical Commission (IEC);
  - (2) Institute of Electrical and Electronics Engineers (IEEE);

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\* This regulation is deliberately left blank.

- (3) Canadian Standards Association (CSA); or
  - (4) Underwriters Laboratories (UL).
- 4 Where special marine-type equipment is required and there is no Standard for it, it must be of a type that is accepted by a recognized organization.
  - 5 A “Product Certification Body” means a body that is accredited by the Standards Council of Canada, or by any other national accreditation organization that is a member of the International Accreditation Forum Multilateral Recognition Arrangement (MLA), to give third-party written assurance that a product meets the specified requirements for the product, including initial certification and maintenance of that certification.
  - 6 The footnote to regulation 40.2: “Refer to the recommendations published by the International Electrotechnical Commission and, in particular, publication IEC 60092 – Electrical installations in ships” can be interpreted to include:
    - (1) the Institute of Electrical and Electronics Engineers’ Standard 45, entitled *Recommended Practice for Electrical Installations on Shipboard* for a vessel that is not a Safety Convention vessel; or
    - (2) the electrical rules of a recognized organization.

**Regulation 41     *Main source of electrical power and lighting systems***

No modification.

**Regulation 42     *Emergency source of electrical power in passenger ships***

- 1 The emergency source of electrical power, its related transforming equipment, if any, transitional source of emergency power, emergency switchboard and emergency lighting switchboard must be located outside of the damage specified in regulation 8 or TP 10943, as applicable.
- 2 The emergency lighting referred to in regulation 42.2 must provide a level of lighting of 50 lx.
- 3 For a vessel that is not a Safety Convention vessel operating within the limits of near coastal voyages, Class 2, the time period requirement of 36 h in regulation 42.2.1 to 42.2.4 can be read as 12 h.
- 4 Instead of complying with regulation 42.2.1.1 and 42.2.1.2, a vessel that is not a Safety Convention vessel that engages on voyages limited to five nautical miles from shore, and sheltered waters voyages can be provided with lights that are permanent or portable that:
  - (1) illuminate every launching station, muster and embarkation station, stowage position of survival craft, passageway and exit; and

- (2) where an alternate system of navigation lights is required, the system must have an emergency power source consisting of a rechargeable storage battery or batteries located outside the machinery space on the vessel and capable of supplying power to the lights for a period of not less than:
  - (i) 1 h for a ferry on runs 1 h or less;
  - (ii) 2 h for a ferry on runs over 1 h; or
  - (iii) 3 h for all other vessels.
- 5 The emergency lighting referred to in regulations 42.2.1.1 and 42.2.1.2 can be supplied or supplemented by rechargeable or non-rechargeable portable or semi-portable battery-operated lanterns.
- 6 For a vessel with non-rechargeable battery-operated hand lanterns, the batteries for the lanterns must be replaced annually.
- 7 A vessel certificated to operate only between sunrise and sunset is not required to be provided with emergency lighting or equipment as required by section 4 above, provided that natural lighting reaches the space.

***Regulation 42-1 Supplementary emergency lighting for ro-ro passenger ships***

- 1 In addition to ro-ro passenger vessels, regulation 42-1 applies to all passenger vessels.

***Regulation 43 Emergency source of electrical power in cargo ships***

- 1 The emergency lighting referred to in regulation 43.2 must provide a level of lighting of 50 lx.
- 2 For a vessel that is not a Safety Convention vessel, the time requirement of 18 h in regulation 43.2.2 to 43.2.5 can be read as:
  - (1) 12 h for near coastal voyages, Class 1;
  - (2) 6 h for near coastal voyages, Class 2, and inland voyages; or
  - (3) 3 h for sheltered waters voyages.
- 3 The emergency lighting referred to in regulation 43.2.1 to 43.2.2 can be supplied or supplemented by rechargeable or non-rechargeable portable or semi-portable battery-operated lanterns.
- 4 For a vessel with non-rechargeable battery-operated hand lanterns, the batteries for the lanterns must be replaced annually.



**Regulation 44**     ***Starting arrangements for emergency generating sets***

No modification.

**Regulation 45**     ***Precautions against shock, fire and other hazards of electrical origin***

- 1 In addition to the requirements of regulation 45, electrical heaters and receptacles must comply with the following:
  - (1) heaters in ventilating trunks and re-heat units must be interlocked with the fan motor supplying air to the unit so that the contactor controlling the heater can only be energized when the fan is running;
  - (2) a certified overheat safety thermostat of the capillary tube type must be set to operate at a maximum temperature of 110°C;
  - (3) electrical receptacles installed within 1.5 m of sinks, eye wash stations, water fountains or wash basins complete with drainpipe, bathtubs or shower stalls, must be protected by an isolating transformer or a ground fault circuit interrupter of the Class A type (on grounded distribution systems only) except where the receptacle is:
    - (i) meant for a stationary appliance designated for the location; and
    - (ii) located behind the stationary appliance so that it is inaccessible for use with general-purpose portable appliances.

**Part E**     ***Additional requirements for periodically unattended machinery spaces***

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**Regulation 46**     ***General***

No modification.

**Regulation 47**     ***Fire precautions***

No modification.

**Regulation 48**     ***Protection against flooding***

No modification.

**Regulation 49**     ***Control of propulsion machinery from the navigation bridge***

No modification.

**Regulation 50**     ***Communication***

No modification.

**Regulation 51**     ***Alarm system***

No modification.

**Regulation 52**     ***Safety systems***

No modification

**Regulation 53**     ***Special requirements for machinery, boiler and electrical installations***

No modification.

**Regulation 54**     ***Special consideration in respect of passenger ships***

No modification.

**Part F**     **Alternative design and arrangements**

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**Regulation 55**     ***Alternative design and arrangements***

No modification.

**Part G**     **Ships using low-flashpoint fuels**

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**Regulation 56**     ***Application***

No modification.

**Regulation 57**     ***Requirements for ships using low-flashpoint fuels***

- 1 For the purpose of paragraph 6.4.13.3.4 of the IGF Code:
  - (1) the fire resistance properties of the thermal insulation materials must meet the non-combustibility (fireproof) requirements of the FTP Code, CAN/ULC-S114, ASTM E136 or an equivalent standard; and
  - (2) the low flame spread characteristics must meet the requirements of the FTP Code or must have a flame spread rating or index of 25 or less when tested according to CAN/ULC-S102, ASTM E84 or an equivalent standard.

- 2 For the purpose of paragraph 6.4.13.3.5 of the IGF Code, the thermal insulation must comply with low flame spread requirements of the FTP Code or must have a flame spread rating or index of 25 or less when tested according to CAN/ULC-S102, ASTM E84 or an equivalent standard.
- 3 In addition to paragraph 6.5.1 of the IGF Code, the portable tank must comply with the requirements of the *Transportation of Dangerous Goods Regulations*.
- 4 For the purpose of paragraph 6.6 of the IGF Code:
  - (1) permanent compressed natural gas tanks must comply with the American Society of Mechanical Engineers' *Boiler and Pressure Vessel Code* or another Standard that provides an equivalent level of safety acceptable to a recognized organization; and
  - (2) portable compressed natural gas tanks must comply with the requirements of the *Transportation of Dangerous Goods Regulations*.
- 5 For the purpose of paragraph 11.3.5 of the IGF Code, the fire protection of fuel pipes that are not purged by nitrogen and led through ro-ro spaces must be insulated to A-60 Standards or located inside a trunk insulated to A-60 Standards.

## **CHAPTER II-2 Construction – Fire protection, fire detection and fire extinction**

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**Information Note:** Chapter II-2 is not incorporated. Refer to the *Vessel Fire Safety Regulations*.

## **CHAPTER III Life-saving appliances and arrangements**

### **Part A General**

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#### ***Regulation 1 Application***

**Information Note:** Regulation 1.5 applies to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

No modification.

#### ***Regulation 2 Exemptions***

No modification.

**Regulation 3**      **Definitions**

1 In addition to the definitions in regulation 3, the following definitions apply:

“*barge*” is a vessel that does not have a mechanical means of propulsion.  
(*chaland*)

“*Class 1 vessel*” is a passenger vessel that is engaged on an unlimited voyage or a near coastal voyage, Class 1. (*bâtiment de classe 1*)

“*Class 2 vessel*” is a passenger vessel that is engaged on a near coastal voyage, Class 1, limited to 120 nautical miles from shore. (*bâtiment de classe 2*)

“*Class 3 vessel*” is a passenger vessel that is engaged on a near coastal voyage, Class 2, or an inland voyage. (*bâtiment de classe 3*)

“*Class 4 vessel*” is a passenger vessel that is engaged on a near coastal voyage, Class 2, limited to five nautical miles from shore, or an inland voyage, limited to 25 nautical miles from shore. (*bâtiment de classe 4*)

“*Class 5 vessel*” is a passenger vessel that is engaged on a sheltered waters voyage. (*bâtiment de classe 5*)

“*Class 6 vessel*” is a vessel that is not a passenger vessel and is engaged on an unlimited voyage or near coastal voyage, Class 1. (*bâtiment de classe 6*)

“*Class 7 vessel*” is a vessel that is not a passenger vessel and is engaged on a near coastal voyage, Class 1, limited to 120 nautical miles from shore. (*bâtiment de classe 7*)

“*Class 8 vessel*” is a vessel that is not a passenger vessel and is engaged on a near coastal voyage, Class 2, or an inland voyage. (*bâtiment de classe 8*)

“*Class 9 vessel*” is a vessel that is not a passenger vessel and is engaged on a near coastal voyage, Class 2, limited to five nautical miles from shore, or an inland voyage, limited to 25 nautical miles from shore. (*bâtiment de classe 9*)

“*Class 10 vessel*” is a vessel that is not a passenger vessel and is engaged on a sheltered waters voyage. (*bâtiment de classe 10*)

“*complement*”, in respect of a survival craft, means the maximum number of persons that the survival craft is designed to carry. (*chargement de personnes*)

“*inflatable survival equipment*” could be an inflatable liferaft, an inflatable rescue platform or a marine evacuation system and includes:

- (1) a container for the inflatable liferaft, the inflatable rescue platform or the marine evacuation system;
- (2) a hydrostatic release unit; and

(3) a release hook for an inflatable davit-launched liferaft. (*équipement de sauvetage gonflable*)

“*inland voyage, limited to 25 nautical miles from shore*” is a voyage that is inland during which a vessel is always within 25 nautical miles from shore. (*voyage en eaux internes, limité à 25 milles marins du littoral*)

“*inland waters of Canada*” has the same meaning as in Section 1 of the *Vessel Safety Certificates Regulations*. (*eaux internes du Canada*)

“*marine evacuation passage*” is a slide or a chute enabling a safe descent in a controlled manner of persons of various ages, sizes and physical capabilities wearing lifejackets from the embarkation station to an inflated liferaft, coastal liferaft or rescue platform. (*passage d'évacuation en mer*)

“*near coastal voyage, Class 1*” has the same meaning as in Section 1 of the *Vessel Safety Certificate Regulations*. (*voyage à proximité du littoral, classe 1*)

“*near coastal voyage, Class 1, limited to 120 nautical miles from shore*” is a voyage that is a near coastal voyage, Class 1, during which a vessel is always within 120 nautical miles from shore. (*voyage à proximité du littoral, classe 1 limité à 120 milles marins du littoral*)

“*near coastal voyage, Class 2, limited to five nautical miles from shore*” is a near coastal voyage, Class 2, during which a vessel is always within five nautical miles from shore. (*voyage à proximité du littoral, classe 2, limité à cinq milles marins du littoral*)

“*readily accessible*” means capable of being reached easily and safely under emergency conditions without the use of tools, including in winter conditions. (*facilement accessible*)

“*sea area A1*” has the same meaning as in Chapter IV of SOLAS. (*zone océanique A1*)

“*sheltered waters voyage*” has the same meaning as in Section 1 of the *Vessel Safety Certificate Regulations*. (*voyage en eaux abritées*)

“*unlimited voyage*” has the same meaning as in Section 1 of the *Vessel Safety Certificates Regulations*. (*voyage illimité*)

#### **Regulation 4      *Evaluation, testing and approval of life-saving appliances and arrangements***

- 1 For the purpose of regulation 4.1, equipment placed on board a survival craft may be approved separately from the survival craft.

#### **Regulation 5      *Production tests***

No modification.

## **Part B Requirements for ships and life-saving appliances**

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### **SECTION I – PASSENGER SHIPS AND CARGO SHIPS**

#### ***Regulation 6 Communications***

**Information Note:** Requirements for survival craft two-way VHF radiotelephone apparatus and search and rescue radar transponders (SART) are provided in the *Navigation Safety Regulations, 2020*.

- 1 A passenger vessel that is not a Safety Convention vessel and that is less than 20 m in length and is engaged on a near coastal voyage, Class 1, must carry three survival craft VHF radiotelephone apparatuses (VHF) stowed so that they are readily accessible for immediate use.
- 2 A vessel that is not a Safety Convention vessel and that is engaged on a voyage within sea area A1 that is not an inland or a sheltered waters voyage, must carry the following number of VHF stowed so that they are readily accessible for immediate use:
  - (1) three VHF, if it is a passenger vessel of 20 m or more in length or a cargo vessel that is 500 gross tonnage or more;
  - (2) two VHF, if it is a cargo vessel that is 300 gross tonnage or more but under 500 gross tonnage.
- 3 A cargo vessel that is not a Safety Convention vessel of 20 m or more in length but under 300 gross tonnage that is engaged on a near coastal voyage, Class 1, must carry one SART, stowed so that it is readily accessible for immediate use.
- 4 Instead of the requirements of regulation 6.3, the vessels specified in column 1 of [Table 1: Flare carriage requirements](#) can carry the number of flares specified in columns 2 and 3 of the table.

**Table 1: Flare carriage requirements**

Column 1	Column 2	Column 3	Column 4
Vessel	Rocket parachute flares	Rocket parachute flares or hand flares	Total number of flares to be carried
Class 3 and 4 <sup>1</sup>	6	6	12
Class 5 <sup>1</sup>	3	3	6
Class 5 <sup>1</sup> which carries an EPIRB <sup>2</sup>	Not required	6	6
Class 7 to 10 of < 85 m in length	6	6	12
Cable ferry	Not required	6	6
Barge carrying crew or passengers	Not required	6	6

- 5 The flares required in section 4 above must comply with the requirements of the LSA Code or the requirements in Parts B and C of TP 14475.
- 6 The flares required in regulation 6.3 and section 4 above must be withdrawn from service no later than four years after their date of manufacture.
- 7 Regulation 6.4 does not apply to a barge that does not carry passengers.
- 8 Instead of regulation 6.4, a barge carrying a crew may carry a loud hailer or an equally efficient means of communication between the tug and the barge.
- 9 In addition to the requirements of regulation 6.5, passenger vessels of Class 1 to 5 must carry a portable battery-powered loud hailer at each muster station where more than 100 persons must be mustered or where a marine evacuation system is used.

### **Regulation 7      *Personal life-saving appliances***

**Information Note:** Regulation 7.2.1 and 7.2.2 apply to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

- 1 In addition to the requirements of regulation 7.1.1, a passenger vessel must have a minimum of one lifebuoy on each side of each deck accessible to passengers.
- 2 Instead of the carriage requirements of regulations 7.1.2 and 7.1.3:
  - (1) Class 3 to 5 vessels, other than cable ferries and barges, set out in columns 1 and 2 in [Table 2: Lifebuoy carriage requirements](#), carrying

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<sup>1</sup> Other than a cable ferry.

less than 36 passengers, must carry the type and number of lifebuoys set out in columns 3 to 6 in the table;

- (2) Class 7 to 10 vessels set out in columns 1 and 2 in [Table 2: Lifebuoy carriage requirements](#) must carry the type and number of lifebuoys set out in columns 3 to 6.
- 3 For the purpose of regulations 7.1.2 and 7.1.3, a barge that is not carrying persons is not required to carry a lifebuoy.

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<sup>2</sup> An EPIRB is an *emergency position-indicating radio beacon*.



**Table 2: Lifebuoy carriage requirements**

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Type of vessel</b>	<b>Length of vessel</b>	<b>Lifebuoys without lines or self-igniting lights</b>	<b>Lifebuoys with self-igniting lights</b>	<b>Lifebuoys with self-activating smoke signals and self-igniting lights</b>	<b>Lifebuoys with buoyant lifelines</b>
Class 3	< 50 m	-	1	1	2
	≥ 50 m to < 85 m	1	1	2	2
	≥ 85 m	2	2	2	2
Class 4	< 50 m	-	2	-	2
	≥ 50 m to < 85 m	2	1	1	2
	≥ 85 m	3	2	1	2
Class 5	< 50 m	-	2	-	2
	≥ 50 m	2	2	-	2
Class 7	< 50 m	-	1	1	2
	≥ 50 m	2	2	2	2
Class 8	< 50 m	-	1	1	2
	≥ 50 m	1	2	1	2
Class 9	< 50 m	-	2	2	2
	≥ 50 m	1	2	1	2
Class 10	< 50 m	1	1	-	2
	≥ 50 m	2	2	-	2
Cable ferry and barge carrying passengers or berthed crew	< 50 m	2	1	-	2
	≥ 50 m	3	1	-	2
Barge carrying unberthed crew	< 30.5 m	2	1	-	1
	30.5 m to 85 m	1	2		2
	≥ 85 m	1	3	-	3

- 4 The lifebuoys prescribed in 2 above that are provided with self-activating smoke signals and self-igniting lights must be capable of quick release from the navigation bridge.
- 5 Despite 4 above, a vessel that engages within near coastal voyages, Class 2, that is designed and constructed with a navigation bridge less wide than its lower deck and that does not extend to the vessel's side can have:
  - (1) lifebuoys, as described above, that are easily and readily accessible for manual deployment;

- (2) procedures and familiarization for the crew, for fast manual deployment of the person overboard lifebuoy;
  - (3) training and drills for the crew on the manual deployment of the person overboard lifebuoy, practiced during person overboard drills.
- 6 The self-igniting light required by 2 above may be of a type that is visible in daylight at a distance of 1 nautical mile on Class 3 to 5 and Class 8 to 10 vessels.
- 7 In addition to the carriage requirements of regulation 7.2.1.1 and 7.2.1.3, a vessel must carry lifejackets of appropriate sizes for each infant, child and adult on board.
- 8 A vessel that is not a Safety Convention vessel can carry lifejackets that comply with the requirements for lifejackets (non-SOLAS) set out in Part B of TP 14475 and the testing requirements for lifejackets (non-SOLAS) set out in Part C of TP 14475.
- 9 In addition to the requirements of regulation 7.2:
  - (1) lifejackets must be stowed in a dedicated location that is clearly marked indicating the number of each and size;
  - (2) where there is only one stowage location, each size of lifejacket must be stowed separately from other sizes;
  - (3) where there is more than one stowage location, the number of lifejackets of each size must be stowed proportionally at each location; and
  - (4) infant and children lifejackets must be stowed readily available for passengers with infants and children of any age.
- 10 For the purpose of regulation 7.3, the immersion suits carried on a Safety Convention vessel must be of a type with inherent insulation and designed to be worn without a lifejacket.
- 11 For the purpose of regulation 7.3, the immersion suits carried on a vessel that is not a Safety Convention vessel may comply with one of the following standards and tests:
  - (1) the LSA Code and IMO Resolution MSC.81(70) for a SOLAS immersion suit, and the Canadian modifications in TP 14475; or
  - (2) ANSI/CAN/UL 15027-2 Standard for Immersion Suits – Part 2: Abandonment Suits, Requirements Including Safety, and the Canadian modifications in TP 14475, and the testing methods as set out in ANSI/CAN/UL 15027-3 Standard for Immersion Suits – Part 3: Test methods.

- 12 In addition to the requirements of regulation 7.3, a vessel that carries an emergency boat must carry immersion suits, or anti-exposure suits meeting the requirements of ANSI/CAN/UL 15027-2 Standard for Immersion suits – Part 2: Abandonment suits, requirements including safety, the testing methods as set out in ANSI/CAN/UL 15027-3 Standard for Immersion suits – Part 3: Test methods, and the Canadian modifications in TP 14475, for every person assigned to crew the emergency boat.
- 13 In addition to the requirements of regulation 7.3, when a vessel is operating in the sea ice areas of eastern Canada, referenced in Annex 1, it must carry an approved anti-exposure suit for each member of the rescue boat crew.

**Regulation 8      *Muster list and emergency instructions***

**Information Note:** Regulation 8 is not incorporated. Refer to the *Fire and Boat Drills Regulations*.

**Regulation 9      *Operating instructions***

**Information Note:** Regulation 9 applies to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

No modification.

**Regulation 10      *Manning of survival craft and supervision***

**Information Note:** Regulation 10 is not incorporated. Refer to the *Marine Personnel Regulations* and the *Fire and Boat Drill Regulations*.

**Regulation 11      *Survival craft muster and embarkation arrangements***

- 1 In addition to the requirement of regulation 11.3, a vessel must have:
  - (1) sufficient clear deck space to allow a continuous and unencumbered flow of persons from the muster stations to the embarkation stations; and
  - (2) embarkation stations, each with sufficient clear deck space for persons to embark into the survival crafts.
- 2 For the purpose of regulation 11.7, embarkation ladders may be replaced by a marine evacuation passage, provided they are equally easy, or easier, to use than the survival craft embarkation ladder when waterborne. In all cases, there must be at least one embarkation ladder on each side of the vessel.

**Regulation 12    *Launching stations***

No modification.

**Regulation 13    *Stowage of survival craft***

- 1 For the purpose of regulation 13.1, survival craft that require launching appliances or arrangements must be stowed as close as possible to accommodation and service areas.
- 2 In addition to the requirements of regulation 13.1, boathooks carried on a survival craft must be secured so as to be readily available for immediate use in fending off.
- 3 For the purpose of regulation 13.4.2:
  - (1) where a vessel that is not a Safety Convention vessel is engaged on a voyage in shallow waters, if the 15 m painter required by paragraph 4.1.3.2 of the LSA Code would unreasonably lengthen the time needed to activate the inflation mechanism of the liferafts or inflatable rescue platforms should the vessel sink, the painter length may be reduced to the length that would permit prompt activation;
  - (2) Class 1 to 3 and Class 6 to 8 vessels are not permitted to use the weak link described in paragraph 4.1.6.2 of the LSA Code in the float-free arrangement.

**Regulation 14    *Stowage of rescue boats***

- 1 For the purpose of regulation 14, the requirements also apply to emergency boats.

**Regulation 15    *Stowage of marine evacuation systems***

- 1 On Class 4 and 5 vessels, a marine evacuation system does not need to comply with the requirements of paragraphs 6.2.2.1.4, 6.2.2.1.5.1 and 6.2.2.1.5.2 of the LSA Code if there is an embarkation ladder permanently fitted adjacent to the embarkation station, in addition to any other embarkation ladder required by regulation 15.

**Regulation 16** *Survival craft launching and recovery arrangements*<sup>3</sup>

- 1 In addition to the requirements of regulation 16:
  - (1) launching appliances or arrangements are only to be used for the purpose of launching survival craft; and
  - (2) where davits are required for lifeboats, rescue boats or emergency boats, a separate set of davits must be provided for each boat.

**Regulation 17** *Rescue boat embarkation, launching and recovery arrangements*

No modification.

**Regulation 17-1** *Recovery of persons from the water*

**Information Note:** Regulation 17-1 applies to a grandfathered vessel one year after the coming into force of the VCER (refer to Section 10 of the VCER).

No modification.

**Regulation 18** *Line-throwing appliances*

- 1 Despite regulation 18, the following classes of vessels are not required to carry a line-throwing appliance:
  - (1) Class 3, 7, 8 and 9 vessels that are less than 85 m long; and
  - (2) Class 4, 5 and 10 vessels.

**Regulation 19** *Emergency training and drills*

**Information Note:** Regulation 19 is not incorporated. Refer to the *Fire and Boat Drills Regulations*.

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<sup>3</sup> This regulation is not applicable to all survival craft, as defined in regulation 3 of this Standard. Requirements for rescue and emergency boats are found under regulation 17.

**Regulation 20**      ***Operational readiness, maintenance and inspections***

**Information Note:** Regulation 20 applies to a grandfathered vessel on the day of the coming into force of the VCER (refer to Section 9 of the VCER).

- 1 In addition to the requirements of regulation 20.2, a vessel that may operate in temperatures below -30°C must ensure that its survival craft is protected from cold weather or fitted with means to ensure it will remain functional in temperatures below -30°C.
- 2 For the purpose of regulation 20.8.1, the interval between servicing of inflatable liferafts can be up to but not more than 30 months if the liferaft complies with the requirements of MSC.1/Circ.1328 and the validity period of the most recent hydrostatic test of the gas cylinders of the inflatable survival appliance will not expire before the next servicing.
- 3 In addition to the requirements of regulation 20.8.1.2, servicing of inflatable survival equipment must also comply with the requirements of ISO 18079 – Ships and marine technology – Servicing of inflatable life-saving appliances.
- 4 For the purpose of regulation 20.8.2, the intervals for deployment of marine evacuation systems must be performed as follows:
  - (1) at least one marine evacuation system is deployed for crew training and system testing, at a minimum of every 2 years; and
  - (2) every marine evacuation system on board must be deployed at least once every 6 years.
- 5 In addition to 4 above, the annual onboard inspection of equipment carried on board a vessel that is not a Safety Convention vessel can be done by the vessel's Safety Officer, if the manufacturer booklet for the inflatable survival equipment contains guidance on how to perform the inspection, as stated in regulation 20.8.3.2. Reports following servicing of the type approved extended liferafts must be kept on board and made available to Transport Canada upon request.
- 6 For the purpose of regulation 20.8.4, the requirements also apply to all survival craft.

**SECTION II – PASSENGER SHIPS (additional requirements)****Regulation 21**      ***Survival craft and rescue boats***

- 1 In addition to the requirements of regulation 21.1.3, a passenger vessel must have an evacuation procedure for the safe evacuation of the full complement within 30 minutes after the abandon ship signal or order is given.

- 2 For the purpose of regulation 21.3:
  - (1) Class 2 and 3 vessels are not required to comply with the requirements of regulation 21.3.1;
  - (2) Class 4 and 5 vessels, including barges and cable ferries, are not required to comply with the requirements of regulation 21.3.1 and 21.3.2.
- 3 For the purpose of regulation 21, all survival craft must contain a SOLAS A emergency pack when engaged on an unlimited or near coastal voyage, Class 1, and a SOLAS B emergency pack when engaged on a near coastal voyage, Class 2, an inland voyage, or a sheltered waters voyage.
- 4 Instead of the requirements of regulations 21.1 and 21.2, Class 2 to 5 vessels, can carry one of the options of survival craft as set out in [Table 3: Passenger vessel survival craft carriage requirements](#), provided that:
  - (1) the total carrying capacity of survival craft must always accommodate the persons on board; and
  - (2) a lifeboat may be accepted as a rescue boat/emergency boat, provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat/emergency boat.
- 5 For the purpose of the requirements in [Table 3: Passenger vessel survival craft carriage requirements](#):
  - (1) A Class 2 passenger vessel of any size must carry:
    - (i) lifeboats, all under launching devices, to accommodate 100% of complement equally distributed on each side;
    - (ii) liferafts, all under launching devices, to accommodate at least an additional 25% of the complement equally distributed on each side; and
    - (iii) for a ro-ro passenger vessel, liferafts must be served by marine evacuation systems.
  - (2) A ro-ro Class 2 passenger vessel of less than 500 gross tonnage with less than 200 persons on board must carry liferafts served by marine evacuation systems.
  - (3) The liferafts required to be carried on a Class 3 passenger vessel of any size must be under launching devices.
  - (4) The liferafts required to be carried on a Class 3 passenger vessel of less than 85 m in length must be under launching devices.
  - (5) A cable ferry's combination of lifeboats, liferafts and inflatable rescue platforms are not required to have a launching device, and the emergency boat may be carried on board or towed.

- (6) A passenger barge's combination of lifeboats, liferafts and inflatable rescue platforms are not required to have a launching device.
- (7) A passenger barge engaged on a near coastal voyage, Class 2, limited to 5 nautical miles from shore, an inland water voyage, limited to 25 nautical miles from shore, or a sheltered waters voyage must carry an emergency boat under launching device; if it is engaged on any other type of voyage, it must carry a rescue boat under launching device.



**Table 3: Passenger vessel survival craft carriage requirements**

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Class or type of passenger vessel	Size of passenger vessel	Lifeboat	Liferaft	Inflatable rescue platform	Rescue boat	Emergency boat
2	-	100% of the complement	25% of the complement	-	$\geq 500$ GT One on each side <hr style="width: 50%; margin: 0 auto;"/> $< 500$ GT One <sup>4</sup>	-
2	$< 500$ GT with $< 200$ persons on board	-	100% of the complement on each side if easily side-to-side transferrable <b>or</b> 150% of the complement on each side	-	One	-
3	-	-	60% of the complement on each side	-	One	-
3	$< 85$ m	-	50% of the complement on each side	-	One	-
4 & 5	-	100% of the complement			-	One <sup>5</sup>
Cable ferry	-	100% of the complement			-	One
Passenger barge		100% of the complement			One	

<sup>4</sup> An emergency boat is not required to be served by a launching device if it can be readily lowered by the launching crew into the water without damage.

<sup>5</sup> The accommodation capacity of an emergency boat may be combined with the required liferaft or inflatable rescue platform capacity requirement. If the vessel freeboard is less than 1.5 m or is fitted with a boarding platform, an emergency boat is not required.

**Regulation 22**     ***Personal life-saving appliances***

**Information Note:** Regulation 22.3 applies to a grandfathered vessel on the day of the coming into force of the VCER (refer to Section 9 of the VCER).

- 1 Instead of the requirements of regulation 22.1, Class 3 to 5 vessels may comply with regulation 7.1 of this Standard.
- 2 Class 4 and Class 5 vessels are not required to comply with the requirements of regulation 22.2.1.
- 3 For the purpose of regulation 22.3.1:
  - (1) a vessel that is grandfathered under section 8 of the VCER must carry a minimum of 20%, 40%, 60%, 80% and 100% of the lifejackets fitted with a personal locator light during, respectively, the first, second, third, fourth and fifth year after the day on which this section comes into force;
  - (2) despite section (1) above, the authorized representative of a vessel fleet can submit to the Minister an alternative compliance plan that ensures the same percentage of lifejackets would be fitted with a personal locator light during the same period across the vessel fleet, instead of the percentage of lifejackets for each individual vessel;
  - (3) Class 2 to 5 vessels operating between sunrise and sunset are not required to comply with the requirements of regulation 22.3.1.
- 4 For the purpose of regulation 22.4:
  - (1) immersion suits must be provided regardless of whether a vessel is constantly engaged on voyages in warm climates; and
  - (2) Class 3 to 5 vessels are not required to comply with the requirements of regulation 22.4.

**Regulation 23**     ***Survival craft and rescue boat embarkation arrangements***

- 1 In addition to the requirements of regulation 23, the means of embarkation into survival crafts when waterborne must be:
  - (1) a slide or chute that is an integral part of a marine evacuation system;  
or
  - (2) if the embarkation deck is less than 4 m above the waterline of the vessel in its lightest seagoing condition, an embarkation ladder that complies with the requirements of regulation 11.7 of Chapter III of SOLAS;
  - (3) in the case of a slide or chute, at least one on each side of the vessel.

- 2 For the purpose of regulation 23, if the embarkation station is less than 1 m above the water in the lightest seagoing condition, embarkation ladders or other means of embarkation are not required.
- 3 In addition to the requirements of regulation 23, any survival craft stowed more than 100 m from the stem or stern, for which a launching appliance or arrangement is not provided, must be provided with an embarkation ladder that complies with the requirements of regulation 11.7 of Chapter III of SOLAS.

**Regulation 24     *Stowage of survival craft***

No modification.

**Regulation 25     *Muster stations***

No modification.

**Regulation 26     *Additional requirements for ro-ro passenger ships***

- 1 Class 2 to 5 vessels:
  - (1) do not require a marine evacuation system or launching appliances complying with the requirements of regulation 26.2.1 if a boarding ramp complying with the requirements of regulation 26.2.3 is provided;
  - (2) may carry liferafts or rescue platforms complying with the LSA Code and TP 14475 in replacement of the automatically self-righting liferafts or canopied reversible liferafts required under regulation 26.2.4;
  - (3) are not required to carry the 50% additional liferaft capacity of regulation 26.2.4;
  - (4) are not required to comply with the requirement of regulation 26.2.5; and
  - (5) are not required to comply with the requirements of regulation 26.4.
- 2 Class 2 to 5 vessels that are cable ferries and passenger barges are not required to comply with the requirements of regulation 26.
- 3 Instead of the requirements of regulation 26.3, Class 2 and 3 vessels may carry a rescue boat and Class 4 and 5 vessels may carry an emergency boat.

**Regulation 27     *Information on passengers***

**Information Note:** Regulation 27 is not incorporated. Refer to the *Fire and Boat Drills Regulations*.

**Regulation 28 Helicopter landing and pick-up areas**

- 1 Class 2 to 5 vessels are not required to comply with the requirements of regulation 28.

**Regulation 29 Decision support system for masters of passenger ships**

- 1 Class 2 to 5 vessels are not required to comply with the requirements of regulation 29.

**Regulation 30 Drills**

**Information Note:** Regulation 30 is not incorporated. Refer to the *Fire and Boat Drills Regulations*.

**SECTION III – CARGO SHIPS (additional requirements)****Regulation 31 Survival craft and rescue boats**

- 1 Instead of the requirements of regulation 31.1.1 to 31.1.3 and 31.1.6 to 31.1.8, Class 7 to 10 vessels may carry the survival craft and person overboard retrieval system as set out in [Table 4: Cargo vessels survival craft carriage requirements](#), and:
  - (1) lifeboats, rescue boats or emergency boats must be served by a launching device or arrangement;
  - (2) the carrying capacity for survival craft on each side of the vessel must accommodate the total amount of persons on board;
  - (3) a lifeboat that is dual certified as a rescue boat may count towards the number of rescue boats or emergency boats required; and
  - (4) a vessel that is over 100 m in length and carries its survival craft aft must carry enough liferafts stowed in the forward part of the vessel to accommodate all of the persons who are berthed there.
- 2 For the purpose of regulation 31, all survival craft must contain a SOLAS A emergency pack when engaged on an unlimited or near coastal voyage, Class 1, and a SOLAS B emergency pack when engaged on a near coastal voyage, Class 2, an inland voyage, or a sheltered waters voyage.
- 3 In addition to the requirements of regulation 31.1.4, Class 7 to 10 vessels and barges that are over 100 m in length and carry their survival craft aft must carry enough liferafts stowed in the forward part of the vessel to accommodate all of the persons who are berthed there.

- 4 For the purpose of the requirements in [Table 4: Cargo vessel survival craft carriage requirements](#):
- (1) a Class 7 vessel that is a tug and that is not an offshore supply vessel may choose to carry one emergency boat instead of a rescue boat.
  - (2) a Class 7 and 8 vessel that is an oil tanker, a chemical tanker, a gas carrier or a tanker barge that carries cargoes having a flashpoint not exceeding 60°C (closed-cup test) must carry fire-protected lifeboats complying with the requirements of section 4.9 of the LSA Code instead of totally enclosed lifeboats complying with the requirements of section 4.6 of the LSA Code.
  - (3) a Class 8 vessel, other than a tanker, but including barges, instead of carrying an emergency boat or a rescue boat, may choose to:
    - (i) carry an efficient person overboard retrieval system that is able to retrieve a floating unconscious person from the water without the need for another person to enter the water;
    - (ii) carry a reboarding device that assists a person to gain access to the vessel from the water;
    - (iii) have the vessel's crew trained and practice regular drills with respect to the recovery of persons overboard;
    - (iv) have safety procedures developed and implemented for all persons working on the weather decks; these procedures include the wearing of personal floatation devices (PFD); and
    - (v) carry liferafts fitted with float free arrangements.
  - (4) Class 9 and 10 vessels, other than tankers, but including barges, instead of carrying an emergency boat or a rescue boat, may choose to:
    - (i) carry an efficient person overboard retrieval system that is able to retrieve a floating unconscious person from the water without the need for another person to enter the water;
    - (ii) carry a reboarding device that assists a person to gain access to the vessel from the water;
    - (iii) have the vessel's crew trained and practice regular drills with respect to the recovery of persons overboard;
    - (iv) have safety procedures developed and implemented for all persons working on the weather decks; these procedures include the wearing of personal floatation devices (PFD); and
    - (v) carry liferafts fitted with float free arrangements.

- (5) Class 9 and 10 vessels that are oil tankers, chemical tankers, gas carriers and tanker barges carrying cargoes having a flashpoint not exceeding 60°C (closed-cup test) must carry a rigid emergency boat.
- (6) a barge that carries a crew must carry sufficient liferafts for the full complement.
- (7) a barge in transit that is not carrying a crew, is not required to carry an emergency boat or a rescue boat, or the alternative equipment listed in sections (i) to (v) below, if the prescribed equipment is carried on the tug.
  - (i) carry an efficient person overboard retrieval system that is able to retrieve a floating unconscious person from the water without the need for another person to enter the water;
  - (ii) carry a reboarding device that assists a person to gain access to the vessel from the water;
  - (iii) have the vessel's crew trained and practice regular drills with respect to the recovery of persons overboard;
  - (iv) have safety procedures developed and implemented for all persons working on the weather decks; these procedures include the wearing of personal floatation devices (PFD); and
  - (v) carry liferafts fitted with float free arrangements.

**Table 4: Cargo vessels survival craft carriage requirements**

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Class of vessel	Type of vessel	Lifeboat	Liferaft % of the complement	Rescue boat	Emergency boat
7	> 85 m other than a tanker	-	100% on each side	One on each side	-
7 and 8	< 85 m other than a tanker	-	100% on each side	One (Class 7)	One (Class 8)
7 and 8	other than a tanker	One on each side or a free-fall type	Minimum 25% on each side	One (Class 7)	One (Class 8)
7 and 8	Tanker	One on each side or a single free-fall type over the stern	100% on each side if easily transferrable side-to-side <b>or</b> 150% on each side	One (Class 7)	One (Class 8)
8	> 85 m other than a tanker	-	100% on each side	One	-
9 and 10	other than a tanker	-	100% on each side	-	One
9 and 10	Tanker	-	100% on each side	-	One rigid
Barge	Not carrying passengers	See requirements in 4(6) and (7) above.			

**Regulation 32 Personal life-saving appliances**

- 1 Instead of the lifebuoy requirements of regulation 32.1.1, Class 8 to 10 vessels may comply with the requirements of regulation 7 of this Standard.
- 2 For the purpose of regulation 32.3.2:
  - (1) a vessel must carry an immersion suit that complies the requirements of regulation 7 of this Standard;
  - (2) a vessel of Class 9 or 10 that is not a tug, and a barge operating solely in sheltered waters, is not required to comply with the requirements of regulation 32.3.2.
- 3 For the purpose of regulation 32.3.4,
  - (1) immersion suits must be stowed in a suitable location, as close as possible to the embarkation stations;
  - (2) standard sized suits must be stowed separately from suits of other sizes, and stowage locations must be marked accordingly.

**Regulation 33**     ***Survival craft embarkation and launching arrangements***

No modification.

**SECTION IV – LIFE-SAVING APPLIANCES AND ARRANGEMENTS REQUIREMENTS****Regulation 34**     ***[untitled]***

No modification.

**SECTION V – MISCELLANEOUS****Regulation 35**     ***Training manual and on-board training aids***

- 1 In addition to the requirements of regulation 35.5, the training manual must be written in the working language of the vessel.
- 2 A barge that is not carrying a crew is not required to comply with the requirements of regulation 35.

**Regulation 36**     ***Instructions for on-board maintenance***

- 1 In addition to the requirements of regulation 36, the written instructions must be in the working language of the vessel.
- 2 A barge that is not carrying a crew is not required to comply with the requirements of regulation 36.

**Regulation 37**     ***Muster list and emergency instructions***

**Information Note:** Regulation 37 is not incorporated. Refer to the *Fire and Boat Drills Regulations*.

**Part C**     ***Alternative design and arrangements***

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**Regulation 38**     ***Alternative design and arrangements***

- 1 An engineering analysis submitted under regulation 38.3 must be written in the working language of the vessel.



## **CHAPTER IV      Radiocommunications**

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**Information Note:** Chapter IV is not incorporated. Refer to the *Navigation Safety Regulations, 2020*.

## **CHAPTER V      Safety of navigation**

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**Information Note:** Chapter V is not incorporated. Refer to the *Navigation Safety Regulations, 2020*.

## **CHAPTER VI      Carriage of cargoes and oil fuels**

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**Information Note:** Chapter VI is not incorporated. Refer to the *Cargo, Fumigation and Tackle Regulations*.

## **CHAPTER VII      Carriage of dangerous goods**

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**Information Note:** Refer to the *Cargo, Fumigation and Tackle Regulations* for additional applicable requirements.

No modification.

## **CHAPTER VIII      Nuclear ships**

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No modification.

## **CHAPTER IX      Management for the safe operation of ships**

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**Information Note:** Chapter IX is not incorporated.

## **CHAPTER X      Safety measures for high-speed craft**

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No modification.

## **CHAPTER XI-1      Special measures to enhance maritime safety**

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**Information Note:** Chapter XI-I is not incorporated. Refer to the *Vessel Safety Certificates Regulations* and TP 15456 - *Canadian Vessel Plan Approval and Inspection Standard*, for regulations 2 and 5.

## **CHAPTER XI-2 Special measures to enhance maritime security**

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**Information Note:** Chapter XI-2 is not incorporated. Refer to the *Marine Transportation Security Act*.

## **CHAPTER XII Additional safety measures for bulk carriers**

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**Information Note:** Only regulations 4, 5, 6.2, 12 and 13 are incorporated – without modifications (refer to Section 108 of the VCER). Refer to the *Cargo, Fumigation and Tackle Regulations* for additional requirements.

No modification.

## **CHAPTER XIII Verification of compliance**

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**Information Note:** Chapter XIII is not incorporated.

## **CHAPTER XIV Safety measures for ships operating in polar waters**

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**Information Note:** Chapter XIV is not incorporated. Refer to the *Arctic Shipping Safety and Pollution Prevention Regulations*.

## **CHAPTER XV Safety measures for ships carrying industrial personnel**

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No modification.

## **PART 2: CREW ACCOMMODATION SPACES AND RECREATIONAL FACILITIES**

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### ***Regulation 3.1 – Accommodation and recreational facilities***

**Information Note:** Regulation 3.1 is not incorporated.

### ***Standard A3.1 – Accommodation and recreational facilities***

**Information Note:** Standard A3.1.6 (h) is not incorporated (refer to paragraph 201(a) of the VCER).

- 1 In addition to standard A3.1, the interior sidewalls and ceilings of every part of the crew accommodation must be covered with paint, paneling, or other suitable material.
- 2 For the purpose of standard A3.1.6 (a), for vessels of less than 500 gross tonnage, the headroom where full and free movement is necessary may be reduced to 190 cm.
- 3 For the purpose of standard A3.1.6 (c), for vessels of less than 500 gross tonnage, the lower part of sleeping rooms may be located below the load line or the deepest water line as determined in the vessel's stability booklet, provided that:
  - (1) the sleeping quarters are located directly below the bulkhead deck;
  - (2) the vessel is equipped with a high water level alarm system located on the sleeping accommodation deck that is audible on the bridge, in the accommodation, and on the upper deck;
  - (3) there is an emergency escape to the evacuation deck, from the compartment where the sleeping quarters are located.
- 4 In addition to standard A3.1.6 (g), the following drainage and electrical criteria must be met:
  - (1) efficient drainage by pipes or channels must be provided for every part of the crew accommodation on an open deck wherever such drainage is needed to clear water shipped from the sea;
  - (2) there must be no drainage from any source that is not sanitary accommodation into sanitary accommodation forming part of the crew accommodation;
  - (3) every space being used for sanitary accommodation must be served by one or more scuppers that do not serve any other space. The scuppers

must be at least 50 mm in diameter and must be situated wherever water is likely to collect on the floor;

- (4) as far as practicable, electric lighting with two independent sources of electricity must be provided in the crew accommodation. If it is not possible to provide two independent sources of electricity for lighting, additional lighting must be provided by installed lamps or lighting apparatus for emergency use.
- 5 For the purpose of standard A3.1.8, if it is impracticable to provide proper natural light in a space, adequate electric light must be available in that space.
- 6 For the purpose of standard A3.1.9 (a), for vessels of less than 3,000 gross tonnage other than passenger vessels and special purpose ships, there can be no more than two seafarers accommodated in a single sleeping room.
- 7 For the purpose of standard A3.1.9 (e), for vessels of less than 500 gross tonnage, the minimum inside width of a berth may be reduced to 68.5 cm.
- 8 For the purpose of standard A3.1.9 (h), A3.1.9 (i) and A3.1.9 (j), for vessels of less than 500 gross tonnage, the sleeping room may be occupied by a maximum of four persons, and in such cases the floor area must be at least:
  - (1) 5 m<sup>2</sup> for two persons;
  - (2) 7 m<sup>2</sup> for three or four persons.
- 9 For the purpose of standard A3.1.9 (k) and A3.1.9 (l), for vessels of less than 500 gross tonnage, the floor area of such sleeping rooms must not be less than 3.7 m<sup>2</sup>, in the case of a sleeping room for one person.
- 10 For the purpose of standard A3.1.9 (m), an adjoining sitting room, day room or equivalent additional space is not required on vessels of less than 3,000 gross tonnage.
- 11 For the purpose of standard A3.1.10:
  - (1) mess rooms on vessels of less than 3,000 gross tonnage must be located as close as practicable to the galley and as far as practicable from sleeping quarters and any place where a hazardous substance may contaminate food, dishes or utensils.
  - (2) the dining area and galley may be combined into one room on vessels of less than 500 gross tonnage.

- 12 For the purpose of standard A3.1.11 (a), in vessels less than 200 gross tonnage, separate sanitary facilities for men and for women are required as far as is practicable.
- 13 For the purpose of standard A3.1.11 (b):
  - (1) the requirement for sanitary facilities to be provide within easy access of the navigating bridge only applies for vessels 500 gross tonnage and above; and
  - (2) the requirement for sanitary facilities to be provided conveniently close to the engine room if one has not been installed close to the engine control room only applies for vessels 1,000 gross tonnage or more.
- 14 For the purpose of standard A3.1.11 (c), the sanitary facility is not mandatory for vessels engaged on voyages of less than four hours in duration.
- 15 For the purpose of standard A3.1.12, a reference to a “voyage” is a reference to an unlimited voyage, a near coastal voyage, a near coastal voyage, Class 1, or an international voyage.
- 16 For the purpose of standard A3.1.13, the laundry facilities are not mandatory if employees are not required to live on board a vessel.
- 17 For the purpose of standard A3.1.14, the open deck is not mandatory if employees are not required to live on board a vessel.
- 18 For the purpose of standard A3.1.15, the office is not mandatory on vessels of less than 24 m.
- 19 For the purpose of standard A3.1.17, the reference to “Regulation 4.3 and the associated Code provisions on health and safety protection and accident prevention” is a reference to the *Maritime Occupational Health and Safety Regulations*.

***Guideline B3.1.1 – Design and construction***

No modification.

***Guideline B3.1.2 – Ventilation***

- 1 In addition to guideline B3.1.2:
  - (1) ventilators must not be situated over a doorway, stairway or in any other position that exhaust fumes will be recirculated;
  - (2) any enclosed space in the seafarers’ accommodation that is not served by a trunked mechanical ventilation system, or by an air conditioning system, must be provided with adequate natural ventilation appropriate to the purpose of the space.

- (3) the effective area of the inlet and exhaust openings in a natural ventilation system serving each space in the crew accommodation must be capable of being adjusted from fully open to fully closed;
- (4) the sectional area of every part of an inlet and exhaust natural ventilation system, other than a part serving only a drying space, must be:
  - (i) at least 39 cm<sup>2</sup> for each person for whose use at any one time the space is appropriated; and
  - (ii) not less than 123 cm<sup>2</sup> at any point in the system;
- (5) the galley must be ventilated by a separate extraction system. An exhaust hood with a vent pipe leading to the open air must be fitted above the cooking stove. The air change rate in the galley must be:
  - (i) at least 9 l/s for each employee who is normally employed in the galley at any one time;
  - (ii) at least 20 air changes per hour for a vessel built or converted for towing, except for tugs of less than 5 gross tonnage;
- (6) in sleeping quarters and galleys, the temperature, measured one metre above the deck in the centre of the room or galley, must be maintained at a level of not less than 18°C and, if practical, not more than 29°C;
- (7) for vessels 200 gross tonnage and above, the amount of air provided for the following type of rooms by mechanical ventilation must be no less than set out below:
  - (i) Change Room:
    - a) for employees with clean work clothes: 5 l/s per m<sup>2</sup> of floor area;
    - b) for employees with wet or sweaty work clothes: 10 l/s per m<sup>2</sup> of floor area; 3 l/s exhausted from each locker;
    - c) for employees who work where work clothes pick up heavy odours: 15 l/s per m<sup>2</sup> of floor area; 4 l/s exhausted from each locker;
  - (ii) Sanitary Facility: 10 l/s per m<sup>2</sup> of floor area; at least 10 l/s per toilet compartment; and
  - (iii) Shower Room: 10 l/s per m<sup>2</sup> of floor area; at least 20 l/s per shower head.

**Guideline B3.1.3 – Heating**

- 1 In addition to guideline B3.1.3:
  - (1) in every sleeping room, dining area, recreation space, galley and toilet space, there must be installed a permanent heating arrangement that, in conjunction with any insulation provided, is capable of maintaining the temperature in those areas at not less than 18°C, having regard to the normal area of operation of the vessel;
  - (2) despite section (1) above, a heating arrangement is not required in that toilet space if the temperature in the space can be maintained at not less than 18°C by heat derived from an adjoining compartment;
  - (3) the heat emitted by the permanent heating arrangements fitted in any space must be capable of being regulated at any setting from full on to off by means of a permanently attached control;
  - (4) a space cannot be heated:
    - (i) by a flow of air from the galley or from any galley equipment; or
    - (ii) directly from the exhaust system or waste gases of machinery or other equipment.

**Guideline B3.1.4 – Lighting**

- 1 For the purpose of guideline B3.1.4, on vessels of 500 gross tonnage or greater:
  - (1) reference to a suitable standard of artificial lighting is a reference to:
    - (i) ANSI/IES RP-7-01, Lighting Industrial Facilities; or
    - (ii) the standard entitled *The IESNA Lighting Handbook: Reference and Application, 9th Edition*, published by the Illuminating Engineering Society of North America (IESNA);
  - (2) the average level of lighting at a visual display terminal task position must not be more than the average level set out below:
    - (i) task positions at which data entry and retrieval work are performed intermittently: 500 lx
    - (ii) task positions at which data entry is preformed exclusively: 750 lx;
  - (3) reflection glare on a visual display terminal screen must be reduced to the point where an employee at a task position is able to read every portion of any text displayed on the screen and see every portion of the visual display on the screen;

- (4) if visual display terminal work requires the reading of a document, supplementary lighting must be provided where necessary to give a level of lighting of at least 500 lx on the document;
- (5) the emergency lighting system must provide a level of lighting of at least 50 lx.
- 2 This guideline does not apply in respect of:
- (1) the navigation bridge of a vessel; and
  - (2) the exterior deck of a vessel where lighting levels may create a hazard to navigation.
- 3 In addition to guideline B3.1.4:
- (1) The average minimum level of lighting in a work area set out in column 1 of the table to this subsection must not be less than the level set out in column 2.

TABLE  
AVERAGE MINIMUM LEVELS OF LIGHTING ON VESSELS

	Column 1	Column 2
Item	Work Area	Average Minimum Level in Lux
1	Office (a) General (b) At the surface of desks	200 500
2	Dry Provision Storage Area	100
3	Workshops (a) General (b) At the bench in an area in which medium or fine bench work or machine work is performed	300 500
4	Service Space — at the head of every stairway, ladder and hatchway	200
5	Galleys (a) General (b) At working position	300 1000
6	Crew Accommodation	200
7	Sanitary Facilities (a) General (b) At mirror	100 200
8	Dining Area and Recreational Facilities (a) General (b) At the surface of tables and desks	100 200
9	Boiler Rooms	200
10	Engine Rooms (a) General (b) At control stations, switchboards and control boards	200 300
11	Generator Rooms	200



- (2) The level of lighting at any place in an area must not be less than one third of the average level of lighting prescribed by this guideline for the area.
- (3) The average level of lighting in an area must be determined by taking four or more measurements at different places in the areas set out below and by dividing the total of the results of the measurements by the number of measurements:
  - (i) if work is performed at a level higher than the deck, at the level at which the work is performed; and
  - (ii) in any other case, 1 m above the deck.
- (4) If the average level of lighting is measured in a dry provision storage room, it must be measured when the room is empty.
- (5) The lighting level measurements must be carried out by a qualified person.
- (6) Unless otherwise specified, all working, walking and climbing areas must be illuminated to:
  - (i) an average level of 50 lx; and
  - (ii) a minimum level of 30 lx at any place in those areas.
- (7) Wherever practicable, natural lighting must be provided in all crew accommodation other than laundries, drying spaces and storage rooms.
- (8) The natural lighting of a sleeping room, mess room, recreation room or hospital ward is sufficient for the purpose of this section if it is sufficient to enable a person of normal vision to read a newspaper at any point in the room, being a point available for free movement, during daylight and in clear weather.

### ***Guideline B3.1.5 – Sleeping rooms***

1 For the purpose of guideline B3.1.5:

- (1) All sleeping rooms must, externally at the door, be clearly marked with:
  - (i) the number of persons for whom the room is intended and approved; and
  - (ii) for whom the room is intended.
- (2) Every sleeping room must be provided with:
  - (i) an electric reading lamp must be installed at the head of each berth;

- (ii) a built-in table top of the sliding or drop leaf type or a desk or a table, for vessels of 24 m or more in length;
  - (iii) seating, in addition to the bed surfaces, sufficient to accommodate at one time all the persons accommodated in the room;
  - (iv) a towel bar or hook;
  - (v) a curtain fitted to each bed, unless the room accommodates only one person.
- (3) For vessels of less than 200 gross tonnage, guidelines B3.1.5.7, B3.1.5.8, B3.1.5.9, B3.1.5.10, B3.1.5.12, B3.1.5.13, B3.1.5.14 and B3.1.5.15 apply only as is reasonable and practicable.

#### ***Guideline B3.1.6 – Mess rooms***

- 1 In addition to guideline B3.1.6, where any member of the crew is required to eat on board a vessel:
- (1) the vessel must be provided with at least one dining area for the crew;
  - (2) every mess room must be provided with sufficient tables to allow a table space of at least 685 mm for each seafarer, measured along the edge of the table, for as many seafarers as are likely to use the room at any time;
  - (3) tables in mess rooms must be at least 685 mm wide if seats are provided at both sides of the table, or 510 mm wide if seats are only provided at one side;
  - (4) every chair in a dining area must:
    - (i) be fitted with securing devices for attachment to the deck;
    - (ii) have a seat at least 380 mm deep; and
    - (iii) have the seat and back made of a material impervious to moisture and easy to clean;
  - (5) benches or seats, complying with the requirements of subsection (4), may be substituted for chairs;
  - (6) every galley must be provided with equipment that will:
    - (i) enable food, sufficient in quantity for all the crew, to be prepared at the same time;
    - (ii) allow the cooking utensils, dishes and cutlery to be properly cleaned.

**Guideline B3.1.7 – Sanitary accommodation**

- 1 In addition to guideline B3.1.7, the sanitary facilities for vessels engaged on voyages of more than four hours must be equipped with:
  - (1) fresh water running from taps that are clearly marked to indicate whether the water supply is hot or cold.
  - (2) toilets that have:
    - (i) a bowl of vitreous china or other suitable material;
    - (ii) a hinged seat;
    - (iii) a trap constructed in a manner that facilitates cleaning; and
    - (iv) a soil pipe of adequate size that is constructed in a manner that facilitates cleaning and minimizes the risk of obstruction;
  - (3) every shower space must:
    - (i) have a non-skid floor surface or be equipped with a floor grating or mat;
    - (ii) be fitted with a handrail;
    - (iii) be fitted with kerbs and with curtains or rigid screens, to retain the water in the shower space; and
    - (iv) have a floor area that measures at least 685 mm on one side and is at least 0.58 m<sup>2</sup>;
  - (4) every shower must be fitted with:
    - (i) controls by which a person using the shower can manually regulate the temperature of the water that flows from the shower head; and
    - (ii) where the hot water supply to the shower is heated to a temperature of over 54°C, an automatic control that will protect a person using the shower from injury by scalding;
  - (5) where light fixtures are fitted inside a shower space, they must be of an approved waterproof type with the switches located outside the shower space;
  - (6) on vessels where seafarers are required to live on board, the employer must provide a laundry facility or other arrangement so that laundry can be done on a regular basis; and
  - (7) if it contains more than one water closet, each water closet must be enclosed in a separate compartment fitted with a door and an inside locking device.

***Guideline B3.1.8 – Hospital accommodation***

- 1 For the purpose of guideline B3.1.8.3, at least one hospital berth is required.

***Guideline B3.1.9 – Other facilities***

No modification.

***Guideline B3.1.10 – Bedding, mess utensils and miscellaneous provisions***

**Information Note:** Guideline B3.1.10 is not incorporated in the VCER. Refer to the *Marine Personal Regulations*.

***Guideline B3.1.11 – Recreational facilities, mail and ship visit arrangements***

**Information Note:** Guideline B3.1.11 is not incorporated (refer to paragraph 201(b) of the VCER).

***Guideline B3.1.12 – Prevention of noise and vibration***

No modification.

**PART 3: ADDITIONAL REQUIREMENTS**

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**Information Note:** For the purpose of section 301 of the VCER, examples of recommended practices and standards for assessing the strength characteristics of a towline, the adequate safety factor over breaking strength, as well as a vessel's bollard pull include:

- Lloyd's Register's Guidance Note for the Classification, Safe Design, Construction and Operation of Tugs
- DNV-SE-0122 Noble Denton marine services – certification for towing vessel approvability
- Lloyd's Register's Bollard Pull Certification Procedures - Guidance Information
- TP 11960 – Standards for the Construction, Inspection, and Operation of Barges Carrying Oil or Dangerous Chemicals in Bulk
- MSC/Circ.884 Guidelines for safe ocean towing
- The Shipowners' Club (P&I Insurance) guide, Tugs and Tows – A Practical Safety and Operational Guide

## **ANNEX 1: SEA ICE AREAS OF EASTERN CANADA**

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- 1 The sea ice areas of eastern Canada are the areas where old ice may be present and are defined as:

(1) the area south of 60° North latitude bounded by:

- (i) in the west, the eastern sea boards of Labrador and Newfoundland;
- (ii) in the east, the line drawn defined by the territorial waters and fishing zones order, zone number 4;
- (iii) in the south,

for the month of January	50° North latitude
for the month of February	49° North latitude
for the month of March	48° North latitude
for the month of April	47° North latitude
for the month of May	48° North latitude
for the month of June	48° North latitude
for the month of July	48° North latitude
for the month of August	56° North latitude
for the month of September	60° North latitude
for the month of October	60° North latitude
for the month of November	57° North latitude
for the month of December	59° North latitude

(2) the area known as the Strait of Belle Isle to the following extent:

- (i) during the months of January, February, March and April, north of 51° North latitude;
- (ii) during the month of May, north of a line drawn between Port au Choix, Pointe Riche, Newfoundland Island and 50° North latitude, 59° West longitude and 50° North latitude, 61° West longitude and the south shore of Quebec at 61° West longitude;

- (iii) during the month of June, north of a line drawn between, Green Point 49°41 North latitude, 57°57 West longitude, Newfoundland Island and 49° North latitude, 60° West longitude and 49° North latitude, 61° West longitude and the South Shore of Quebec at 61° West longitude.
- (iv) during the month of July North 51° North latitude.

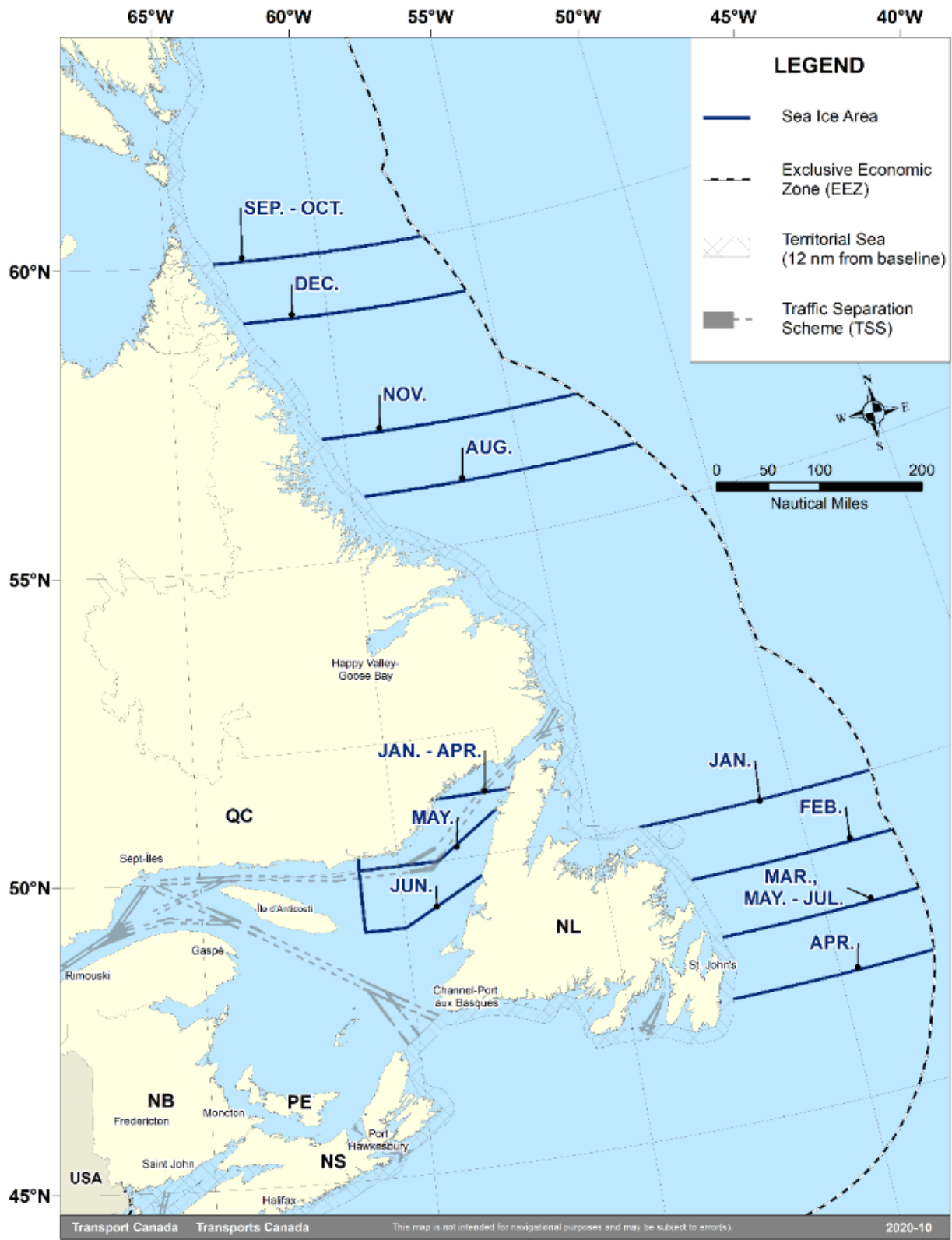


Image: Map of the Sea Ice Area of Eastern Canada, as described in section 1 above.