VESSEL CONSTRUCTION AND EQUIPMENT REGULATIONS – CANADIAN MODIFICATIONS TO THE SOLAS CONVENTION

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Marine Safety

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CHAPTER II-1 Construction – Structure, subdivision and stability, machinery and electrical installations

Part A General

Regulation 1 Application

Information note:
Regulation 1 is not incorporated, see section 101 of the Vessel Construction and Equipment Regulations (VCER).

Regulation 2 Definitions
1 “fresh water” means, for the purpose of this document, the St. Lawrence River, west of the eastern end of the Ile d’Orleans.

Regulation 3 Definitions relating to parts C, D and E
No modification.

Part A-1 Structure of ships

Regulation 3-1 Structural, mechanical, and electrical requirements for ships
No modification

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 vessels 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 on tankers
1 Emergency towing arrangements on tankers
No modification

2 Emergency procedures on ships
No modification
Information note:

Regulation 3-4.2 will apply to all vessels one year after the coming into force of the Regulations: see section 20 of the Regulations.

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

1    Application
     No modification

2    Means of access to cargo and other spaces
     No modification

3    Safe access to cargo holds, cargo tanks, ballast tanks and other spaces
     No modification

4    Ship Structure Access Manual
     No modification

5    General technical specifications
     No modification

Regulation 3-7    Construction drawings maintained on board and ashore

1    Vessels that are not Safety Convention vessels do not need to keep on board the construction drawings as per Regulations 3-7.

Regulation 3-8    Towing and mooring equipment
                 No modification
Regulation 3-9  Means of embarkation on and disembarkation from ships

1 Regulation 3-9 does not apply to vessels that are not Safety Convention vessels. *(Embarkation ladder may be required in certain non-convention vessel, e.g. vessels required to take a pilot. Verification to be made if already covered by other regulations e.g. Navigation Safety Regulations.)*

Information note:

Vessels fitted with means of embarkation must comply with the requirements stated in the *Cargo, Fumigation and Tackle Regulations*, SOR/2007-128.

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

1 Regulation 3-12 does not apply to vessels that are not Safety Convention vessels to which the Marine Occupational, Safety and Health Regulations apply. *(Noise requirements are addressed by the Marine Occupational, Safety and Health Regulations. However some of the construction aspect of the IMO Noise Code (e.g. Ch.6) may be incorporated in the VCER, to be determined.)*

Part B  Subdivision and stability

Regulation 4  General

No modification
Part B-1 Stability

**Regulation 5 Intact Stability**

As stated in the Regulations:

102. In addition to the requirements of the 2008 IS Code referred to in Regulations 5 of Chapter II-1 of SOLAS, a vessel’s authorized representative must ensure that the Canadian modifications set out in TP 7301 are met, as applicable. {TP 7301 to be updated and incorporated to modify supplement the IS Code}

1 For the purposes of this part, regulation 5.2 applies to cargo vessels as well as passenger vessels subject to provisions of guidelines included in MSC/Circ.1158 being met. {Regulation 5.3 in reference to existing data for similar ships, it would not be necessary for domestic vessels.}

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

No modification

**Regulation 6 Required subdivision index R**

No modification

As stated in the Regulations:

103. The authorized representative of a passenger vessel not subject to the Safety Convention may comply with the requirements set out in Part II of TP 10943 instead of complying with the requirements of Regulations 6 to 8 of Chapter II-1 of SOLAS. {TP 10943 to be updated and incorporated as an alternative to Regulations 6 to 8}

**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  Application

1.1  Regulation 8-1 does not apply to passenger vessels that are not Safety Convention vessels and that do not go beyond a near coastal voyage, Class 2.

2  Availability of essential systems in case of flooding damage

   No modification

3  Operational information after flooding casualty

   No modification

Part B-2  Subdivision, watertight and weathertight integrity

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

1  For the purposes of regulation 9, a double bottom need not be fitted on the following vessels:

   a)  cargo vessels of less than [500 gross tonnage]; and

   b)  vessels not propelled by mechanical means.

1.1  For a passenger vessel that is not a Safety Convention vessel and that complies with the TP10943, regulation 7-2 of the Convention does not apply and the vessel must instead comply with the applicable stability criteria of TP10943. [There may be a need to specify the applicable sections of TP10943]

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  For vessels of not more than 500 gross tonnage that operate on inland waters other than the Great Lakes, hinged watertight doors may be installed within accommodation and working spaces (except machinery spaces) instead to comply with regulation 13.5.1 to 13.8.3.

2  Hinged watertight doors must comply with the following:

2.1  The installation shall comply with conditions for doors between cargo spaces specified in 13.9.1;

2.2  It must preserve the watertightness and strength of the bulkhead in which it is fitted;

2.3  To be closed with means other than gravity or dropping weight, and shall be operable from each side of the bulkhead on which it is fitted;

2.4  To be kept closed at all times except when actually being used for transit;

2.5  To show a notice that shall be posted at the door to indicate that it shall be kept closed during navigation. The Master shall ensure that a notice to this effect is posted in the wheelhouse;

2.6  To provide an indication (visual and audible alarm) to the navigation bridge whether the doors are open or closed.

3  For the purpose of regulation 13.9.1, “if the Administration is satisfied” shall be interpreted as meeting the requirements of 13.1 and 13.2 of this regulation.

Information note:

Regulation 13.6 does not apply to hinged watertight doors. When it is permitted to fit a watertight hinged door, Regulation 13.7.3 need not be complied with.

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

No modification

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  
*Regulation 15.9 does not apply to vessels to which the Load Lines Regulations apply.*

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

1  
In addition to the requirement of *Regulation 15-1.3*, control positions are to be provided with a system of warning indicator lights. The system is to provide positive indication that the door is fully closed, secured and locked. The indication arrangements are to be “fail-safe” such that in the event of a fault, the system cannot incorrectly indicate that the doors are fully closed, secured or locked.

**Regulation 16  Construction and initial tests of watertight doors, sidescuttles, etc.**

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**

No modification
Part B-3 Subdivision load line assignment for passenger ships

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

1. In regulation 18.2 for passenger vessels not subject to the Safety Convention to which the Load Line Regulations apply, the letter P1, P2, etc. shall be read C1, C2, etc.

2. For the purpose of regulation 18.2 and 18.4 for passenger vessels not subject to the Safety Convention the expression ”Passenger Ship Safety Certificate” shall be read as the “Inspection Certificate”.

3. For the purpose of regulation 18.5 and 18.5 for vessels engaged exclusively on fresh-water voyage; or vessels holding a Great Lakes and Inland Waters of Canada Load Line Certificate reference to “salt water” shall be read as ”fresh water”.

**Information Note:**

The Authorized Representative of a vessel that is not required to hold a Load Lines Certificate under the Load Line Regulations, SOR/2007-99, shall ensure that the vessel has a letter stating the subdivision draught at which the ship is permitted to operate; and that the letter is posted in the wheelhouse, under glass, adjacent to the Inspection Certificate.

Vessels that are not required to comply with Load Line Regulations, SOR/2007-99, shall comply with the conditions of assignment set out in the Schedule 1 of the Regulations or with Conditions of Assignment set out in Chapter II of Annex I to the Load Lines Convention.

Part B-4 Stability management

**Regulation 19 Damage control information**

No modification

(For regulations 19.3 and 19.4, the guidelines (MSC.1/Circ.1245) need to be verified if they cover everything. Will we apply these guidelines for Domestic vessels subjected to TP 10943?)

**Regulation 20 Loading of passenger 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 22.4 the Administration shall be read as the Marine Technical Review Board. \(\text{Note that MSC 94 approved the deletion of paragraph 22.4 see MSC 94/21/. Canadian modification to be updated accordingly}\)

Regulation 22-1  Flooding detection systems for passenger ships carrying 36 or more persons constructed on or after 1 July 2010

No modification

Regulation 23  Special requirements for ro–ro passenger ships

No modification

Regulation 24  Prevention and control of water ingress, etc., in cargo ships.

No modification

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

No modification

Part C  Machinery installations

Regulation 26  General

1  In addition to the requirements of this regulation, the vessels engaged on a voyage within Eastern Canadian waters and operating in slush ice conditions that are not built to Classification Society Rules for navigation in ice, shall ensure the sea inlets are designed and constructed to prevent slush and/or spray ice from blocking the seawater cooling intakes and related air vents.

Information note:

For guidance, see MSC/Circ.504 Guidance on Design and Construction of Sea Inlets Under Slush Ice Conditions, or other appropriate guidelines [TP 15163, TP 5064, SSB 08/1989] providing an equivalent safety level.

Regulation 27  Machinery

No modification

Regulation 28  Means of going astern

No modification
Regulation 29  Steering gear

1 As an alternative to regulation 29.1, an auxiliary steering gear is not required for double-ended vessels with two independent steering systems, one fore and one aft, if in the case of failure of one of the steering systems the corresponding rudder can be safely and speedily brought back to the centre line and kept steady in that position.

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 purposes of regulation 35-1.3.2, domestic vessels may have a number of bilge pumps reduced when it complies with provisions of a Recognized Organization.

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

*Regulation 40   General*

**Information note:**

In addition, the footnote stated in regulation 40.2 may also be interpreted as the Institute of Electrical and Electronic Engineers Standard 45 entitled *Recommended Practice for Electrical Installations on Shipboard with Respect to a Vessel Engaged on a Domestic Voyage.*

Equipment approvals:

Electrical equipment which includes appliances, accessories and fittings shall be approved by a recognized classification society or product certification body as meeting the rule or code under which it is designed; and shall bear the identification mark of the testing laboratory or product certification body that verifies that the equipment meets the rule or code.

Where special marine type equipment is required and there is no standard for it, it shall be of a type that is acceptable to the 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  For domestic vessels on near coastal, Class 2 voyages, the time period requirement of 36 h in regulation 42.2.1 to 42.2.4 may be read as 12 h. *In case of vessels engaged regularly on voyages of shorter duration, a lesser period than 12 h may be considered, provided that the level of safety is maintained and information in respect of vessel type; and that voyage and other safety equipment it carries are submitted to the Marine Technical Review Board (MTRB) for review and approval.]*

2  Instead of complying with regulation 42, domestic vessels on near coastal, Class 2 voyages limited to five miles from coast and sheltered waters may comply with the following requirements:

2.1  Subject to section (2.2), every vessel, other than a small passenger vessel certificated to operate only between sunrise and sunset, shall be provided with lights that are permanent or portable and that:

a)  Will illuminate every launching station, muster and embarkation station, stowage position of survival craft, passageway and exit; and

b)  can be supplied with electrical power from an emergency source described in section (2.2).
2.2 Where a vessel to which section (2.1) applies is provided with lights described in that section, the vessel shall be provided with an emergency source of electrical power 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 as follow:

- a) Ferries on runs over 1 h, min time 2 hrs;
- b) ferries on runs 1 h and under, min time 1hr; and
- c) other vessels, 3 hrs minimum.

3 Where the alternate system of navigation lights is required, the system shall be provided with an emergency source of power in accordance with (2.2).

**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. *(SOLAS 42-1 applies only to ro-ro but TP 10943 with similar requirements applies to all passenger vessels.)*

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

1 For domestic vessels, the time period requirement of 18 h in regulation 43.2.2 to 42.2.5 may be read as;

- a) 12 h for near coastal class 1 voyage;
- b) 6 h for near coastal class 2 voyage; or
- c) 3 h for shelter waters voyage.

2 The emergency lighting referred to in regulation 43.2.1 to 43.2.3 may be supplied by rechargeable or non-rechargeable portable or semi-portable battery operated lanterns.

3 In vessels with non-rechargeable battery-operated hand lanterns, the batteries for the lanterns shall be replaced with new batteries 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 regulation 45, following requirements with respect to electrical heaters and receptacles are to be complied with:

1.1 Heaters in ventilating trunks and re-heat units shall 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; a certified overheat safety thermostat of the capillary tube type shall be provided and set to operate at a temperature not exceeding 110°C.
1.2 Electrical receptacles installed within 1.5 m of sinks (bathrooms, washrooms or wash basins complete with drainpipe), bathtubs or shower stalls shall be protected by an isolating transformer or a ground fault circuit interrupter of the Class A type (on a grounded distribution systems only) except where the receptacle is:

a) Intended for a stationary appliance designated for the location; and

b) located behind the stationary appliance such that it is inaccessible for use with general-purpose portable appliances.

Part E Additional requirements for periodically unattended machinery spaces

**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

Regulation 55  Alternative design and arrangements

1  Purpose
   No modification

2  General
   No modification

3  Engineering analysis
   No modification

4  Evaluation of the alternative design and arrangements
   No modification

5  Exchange of information
   No modification

6  Re-evaluation due to change of conditions
   No modification
CHAPTER II-2  Construction - Fire protection, fire detection and fire extinction

Information Note

Chapter II-2 is not incorporated. For fire safety requirements refer to the Vessel Fire Safety Regulations. [It is anticipated that the proposed VFSR will be in force prior to the Vessel Construction and Equipment Regulations]
CHAPTER III       Life-saving appliances and arrangements

Part A       General

Regulation 1       Application

Information note
Regulation 1 is not incorporated; for the application see the Vessel Construction and Equipment Regulations

Regulation 2       Exemptions

Information note
Regulation 2 is not incorporated; alternative requirements for limited voyages are stated in the supplement

Regulation 3       Definitions

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

“approved boat” means a boat that is constructed, marked, repaired and approved in accordance with TP 14475 and that was approved as an “approved boat” under the Life Saving Equipment Regulations as they read before April 28, 1996.

“buoyant apparatus” means a rigid, rectangular device that is effective and stable when floating either way up, has no projections that would prevent it from sliding easily over a vessel’s rail, and requires no adjustment before use. {Definition may need to be modified to refer to the design and approval standard for buoyant apparatus}

“Class 1 lifeboat” has the same meaning as in the Life Saving Equipment Regulations.

“Class 2 lifeboat” has the same meaning as in the Life Saving Equipment Regulations.

“Class 1 vessel” means a passenger vessel that is engaged on an unlimited voyage or a near coastal voyage, Class 1.

“Class 2 vessel” means a passenger vessel that is engaged on a near coastal voyage, Class 1, limited to 120 miles from shore.

“Class 3 vessel” means a passenger vessel that is engaged on a near coastal voyage, Class 2.

“Class 4 vessel” means a passenger vessel that is engaged on a near coastal voyage, Class 2, limited to 5 miles from shore.
“Class 5 vessel” means a passenger vessel that is engaged on a sheltered waters voyage.

“Class 6 vessel” means a vessel that is not a passenger vessel and is engaged on an unlimited voyage or near coastal voyage, Class 1.

“Class 7 vessel” means a vessel that is not a passenger vessel and is engaged on a near coastal voyage, Class 1, limited to 120 miles from shore.

“Class 8 vessel” means a vessel that is not a passenger vessel and is engaged on a near coastal voyage, Class 2.

“Class 9 vessel” means a vessel that is not a passenger vessel and is engaged on a near coastal voyage, Class 2, limited to 5 miles from shore.

“Class 10 vessel” means a vessel that is not a passenger vessel and is engaged on a sheltered waters voyage.

“complement”, in respect of a survival craft, means the maximum number of persons that the survival craft is designed to carry.

“emergency boat” means a vessel designed to be used for rescuing persons in distress and marshalling survival craft.

“Miles” means nautical miles.

“near coastal voyage, Class 1, limited to 120 miles from shore” means a voyage that is a near coastal voyage Class 1 during which a vessel is always within 120 miles from shore.

“near coastal voyage, Class 2, limited to 5 miles from shore” means a near coastal voyage Class 2 during which a vessel is always within 5 miles from shore.

“readily accessible” means capable of being reached easily and safely under emergency conditions without the use of tools.

“rigid”, in respect of a liferaft, an emergency boat or a rescue boat, means constructed of rigid materials or a combination of rigid materials and inflatable compartments and not relying wholly on inflatable compartments for buoyancy and form. {verify if this definition is need, as “rigid” is addressed in the LSA Code}

“survival craft” means a lifeboat, a rescue boat, an emergency boat, a suitable boat, an approved boat, a buoyant apparatus, a rigid liferaft and an inflatable survival appliance.

“suitable boat” means a boat accepted as a “suitable boat” under the Life Saving Equipment Regulations [as they read before April 28, 1996]. {Date reference to be verified}

“visual signal” means rocket parachute flares, hand flares and buoyant smoke signals.
Regulation 4  Evaluation, testing and approval of life-saving appliances and arrangements

1 Upgrading provisions for grandfathered vessels

1.1 If a survival craft referred to in column 1 of the table to this subsection that was carried on a grandfathered vessel is replaced the grandfathered vessel must carry the survival craft referred to in column 2.

<table>
<thead>
<tr>
<th>Item</th>
<th>Column 1 Survival craft on a grandfathered vessel</th>
<th>Column 2 Replacement Survival craft</th>
<th>Column 3 Voyage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Class 1 lifeboat</td>
<td>Lifeboat</td>
<td>Any</td>
</tr>
<tr>
<td>2.</td>
<td>Class 2 lifeboat</td>
<td>Lifeboat</td>
<td>Any</td>
</tr>
<tr>
<td>3.</td>
<td>Suitable boat</td>
<td>Emergency boat</td>
<td>Any</td>
</tr>
<tr>
<td>4.</td>
<td>Approved boat or emergency</td>
<td>Rescue boat</td>
<td>near coastal voyage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Class 1 or an unlimited voyage</td>
</tr>
<tr>
<td>5.</td>
<td>Approved boat or emergency</td>
<td>Emergency boat</td>
<td>sheltered waters voyage or a near coastal voyage, Class 2</td>
</tr>
</tbody>
</table>

1.2 An emergency boat carried on a grandfathered vessel engaged on a near coastal voyage, Class 1 or an unlimited voyage must be replaced by a rescue boat before [July 1, 2020]. {Date to be five 5 years after the coming into force}

Regulation 5  Production tests

No modification

Part B  Requirements for ships and life-saving appliances

SECTION I – PASSENGER SHIP AND CARGO SHIPS

Regulation 6  Communications

1.1 Regulation 6.2 applies to any cargo vessel of any gross tonnage to which these Regulations applies.

2 Radio life-saving appliances

2.1 Two-way VHF radiotelephone apparatus

2.1.1 Instead of the requirements of regulation 6.2.1.1 the Classes of vessel in column 1 may carry the number of two-way VHF radio telephone apparatus as specified in column 4 of the following table:
VESSEL CONSTRUCTION AND EQUIPMENT REGULATIONS – SUPPLEMENT TO THE SOLAS CONVENTION

### Column 1 | Column 2 | Column 3 | Column 4
---|---|---|---
Class of Vessel | Voyage limitation | Gross Tonnage | Vessels carrying inflatable rescue platform | Two-way VHF radio telephone apparatus
4 | - | - | 1 platform | 1
4 | - | - | 2 or more platforms | 2
5 | - | - | - | 0
6 | - | < 300 | - | 1
7 | - | < 300 | - | 1
8 | Inland voyage | < 300 | - | 0
8 | Other than inland voyage | < 300 | - | 1
9 | - | - | - | 0
10 | - | - | - | 0

2.2 **Search and Rescue locating devices**

2.2.1 Instead of the requirement of regulation 6.2.2 the Class of vessels in column 1 must carry the number of Search and Rescue locating device (SART) as specified in column 4 of the following table:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of</td>
<td>VHF coverage</td>
<td>Gross Tonnage</td>
<td>Vessels carrying inflatable rescue</td>
</tr>
<tr>
<td>Vessels</td>
<td>area or sea area</td>
<td></td>
<td>platform</td>
</tr>
<tr>
<td>2</td>
<td>Within at all time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Within at all time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Beyond</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>1 or more</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>&lt; 300</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Within at all time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Beyond</td>
<td>&lt; 300</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Within at all time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Beyond</td>
<td>&lt; 300</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Within at all time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Beyond</td>
<td>&lt; 300</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Within at all time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Beyond</td>
<td>&lt; 300</td>
<td>-</td>
</tr>
</tbody>
</table>

### Distress flares

3.1 Instead of the requirements of regulation 6.3 the following classes of vessels must carry at least the distress flares or electronic distress-alerting device specified in the following table:
3.2 Every visual signal required by regulation 6.3 must be withdrawn from service no later than four years after its date of manufacture.  *(Clarification needed as SOLAS flare do not have the expiry date marked, TP14475 requires a manufacturing date to be marked on the flares)*

4 On-board communications and alarm systems

No modification

5 Public address systems on passenger ships

No modification

**Regulation 7  Personal life-saving appliances**

1 Lifebuoys

1.1 Instead of the self-igniting smoke signal required by regulation 7.1.3 vessels engaged on sheltered waters voyage or near coastal voyage class 2 may carry a self-igniting light that is visible in day light at a distance of 1 mile. *(A standard may have to be defined to accept self-igniting lights, intensity at 1 mile, life, etc. unless an existing-light specification is used (e.g. lifeboat or survival craft lights?))*

1.2 In addition to the requirement of regulation 7.1.4 the marking must be in a colour that contrasts with that of the lifebuoy and be not less than 50 mm in height.

2 Lifejackets

2.1 Instead of the requirements of regulation 7.2.1.1, 7.2.1.2, and 7.2.1.3 Class 1 to 10 vessels must carry a lifejacket of an appropriate size for each person on board. *(The intention is to remove the fixed additional amount (e.g. 10%) and require a proper size lifejacket for all persons on board)*

2.2 In addition to the requirements of regulation 7.2 must be stowed:

   a) in a dedicated location that is conspicuously marked as to the number and size;

   b) where there is more than one location of stowage, each size of lifejacket must be stowed separately from other sizes stowed in the same location;
c) [excluding infant lifejackets], where there is more than one location of stowage the number of lifejackets of each size must be stowed proportionally at each location; and

d) [infant lifejackets shall be stowed to be made readily available for passengers with infants.]

2.3 Instead of a lifejacket complying with the requirements of sections 2.2.1 or 2.2.2 of the LSA Code, a vessel may carry a Class 1 lifejacket that meets the requirements of Canadian General Standards Board CAN/CGSB-65.7-2007, Life Jackets. {Note that Lifejackets made to the withdrawn standard CAN/CGSB-65-GP-14M will no longer be accepted on new vessels}

3 Immersion suits and anti-exposure suits

3.1 A vessel of Class 4, 5, 6, 7, 8, 9, or 10 is not required to carry the immersion suits or the anti-exposure suits required by regulation 7.3.

3.2 In addition to the requirements of regulation 7.3, if an immersion suit is provided, it shall be approved as:

a) Having sufficient buoyancy to meet the requirements of 2.3.1 of the LSA Code without a lifejacket and meeting the requirements of 2.3.2.2 of the LSA Code with inherent insulation; or

b) Meeting the requirements of the Canadian General Standards Board standard CAN/CGSB-65.16-2005 Marine Abandonment Immersion Suit Systems, as amended.

3.3 Immersion suits referred to in regulation 7.3 must be provided regardless of whether a vessel is constantly engaged on voyages in warm climates.

3.4 [Each immersion suit and carried on a vessel must have instructions, in English and French, and diagrams explaining how to put on and use the suit.]

{Verify if this should be replaced by a general requirement for French and English instructions, or addressed in TP 14475 (see 15.1.2.2)}

Regulation 8 Muster list and emergency instructions

Information note:

Regulation 8 is not incorporated.

For equivalent requirements refer to the Fire and Boat Drills Regulations apply.

Regulation 9 Operating Instructions

No modification
**Regulation 10   Manning of survival craft and supervision**

Information note:

Regulation 10 is not incorporated.

Regulations 10.2 to 10.4 and 10.6 are addressed by the *Marine Personnel Regulations* apply.

Regulations 10.5 and 10.7 are addressed by the *Fire and Boat Drills Regulations* apply.

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

1.1 In addition to the requirement of regulation 11.2, if the embarkation station and the muster stations are combined in a single station, it shall provide a clear area of at least 0.25 m² per person assigned to that station for marshalling and instructions in addition to the space required to launch a survival craft. *(From LSER s.135, to be verified, may no longer be necessary for new vessels, SOLAS 11.2 has been amended to require 0.35m²)*

1.2 In addition to the requirement of regulation 11.3 a vessel must have:
   
   a) Sufficient clear deck space to allow a continuous and unencumbered flow of persons from the muster station to the embarkation station; and
   
   b) Embarkation stations, each with sufficient clear deck space for persons to embark into the survival crafts. *(Verify is sufficient clear deck space should be defined, e.g. 0.5m² per person see LSER s.134)*

1.3 For the purpose of regulation 11.7, embarkation ladders may be replaced by other devices that provide an access that it at least equal or easier to use than the embarkation ladder to the survival craft when waterborne, but in all cases there must be at least one embarkation ladder on each side of the vessel.

**Regulation 12   Launching stations**

1.1 In addition to the requirements of regulation 12, if davits or launching appliances or arrangements are required to launch survival craft, other than liferaft, a separate set of davits or launching appliances or arrangements must be provided for each survival craft.

**Regulation 13   Stowage of survival craft**

1.1 In addition to the requirements of regulation 13:

1.1.1 Liferafts, inflatable rescue platforms and buoyant apparatus must be stowed:
a) where the rigging, cables, structure and gear will not impede the manual launch or float free capability;  
b) so that they can be easily accessed and deployed in an emergency;  
c) so that they can be launched by one or two persons; and  
d) would not be dragged under the vessel, if it was sinking.

1.1.2 To ensure float free capability liferafts, including those that are davit launched, inflatable rescue platforms and buoyant apparatus must be:  
a) placed in deep chocks, without lashing, so that they float free automatically if the vessel sinks,  
b) secured by lashing fitted with a hydrostatic unit, or  
c) placed or secured so that they will automatically float free;

1.1.3 If a weak link is used in the float-free arrangement, it:  
a) must not break by the force required to pull the painter from the liferaft, coastal liferaft or inflatable rescue platform container,  
b) if applicable must be of sufficient strength to permit the inflation; and  
c) must break under a strain of 2.2 ± 0.4 kN.

1.1.4 If the vessel is engaged on a voyage in shallow waters, the 15 m painter required by section 4.5.1.5 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. \(\text{[LSER Sch.VIII s.4(2)]}\)

1.1.5 Survival craft that require launching appliances or arrangements must be stowed as close to accommodation and service areas as possible.

1.1.6 All equipment, other than boathooks, that is carried on a lifeboat, rescue boat or emergency boat must be:  
a) secured in the boat by lashings, stowed in lockers or compartments or secured to brackets or other similar mountings;  
b) secured so that it does not interfere with procedures for abandoning vessel;  
c) packed in as light and compact a form as is feasible; and

1.1.7 Boathooks must not be secured to be readily available for immediate use in fending off.

1.1.8 Every inflatable rescue platform shall be stowed in accordance with the requirements of regulation 13.4.1.
Regulation 14  Stowage of rescue boats
No modification

Regulation 15  Stowage of marine evacuation systems
No modification

Regulation 16  Survival craft launching and recovery arrangements
No modification

Regulation 17  Rescue boat embarkation, launching and recovery arrangements
1  On a grandfathered vessel, if an approved boat or suitable boat is replaced by a rescue boat or emergency boat in accordance with regulation 4 section 1 of this supplement, any launching appliance or recovery arrangement for the approved boat or the suitable boat need not be upgraded to meet the requirements of a rescue boat or emergency boat if:
   a) the safe working load of the launching appliance or recovery arrangement is not exceeded by the rescue boat or emergency boat, including its equipment and launching crew if required; and
   b) if a rescue boat is carried instead of a prescribed emergency boat, the launching appliances and recovery arrangements need to meet only the standards prescribed for an emergency boat provided that the launching appliances or arrangements complies with paragraph a) and the Record of Safety Equipment for the vessel must indicate under the heading “Type of Safety Equipment” that a rescue boat is being carried as an emergency boat.

Regulation 17-1  Recovery of persons from the water
No modification

Regulation 18  Line-throwing appliances
1  The following Class of vessels are not required to carry a line-throwing appliance required by regulation 18:
   a) Class 3, 7, 8 and 9 vessels of less than 85 m;
   b) Class 4, 5 and 10 vessels.
Regulation 19  Emergency training and drills

Information note:
Regulation 19 is not incorporated.

Vessels must comply with the equivalent requirements of the Fire and Boat Drills Regulation.

Regulation 20  Operational readiness, maintenance and inspections

1 No modification

2 Operational readiness
   No modification

3 Maintenance
   3.1 In addition to the requirements of regulation 20.3:
   a) Immersion suits must be inspected monthly in accordance with the Guidelines for Monthly Shipboard Inspection of Immersion Suits and Anti-Exposure Suits by Ships’ Crews, the Annex to IMO MSC/Circ. 1047;
   b) Immersion suits must be subjected to an air pressure test at intervals not exceeding three years, or more frequently if the suits are over 10 years of age, in accordance with Guidelines For Periodic Testing Of Immersion Suit And Anti-Exposure Suit Seams And Closure, the Annex to IMO MSC/Circ. 1114; and
   c) The anti-exposure suits carried on a vessel must be inspected monthly in accordance with the Guidelines for Monthly Shipboard Inspection of Immersion Suits and Anti-Exposure Suits by Ships’ Crews, the Annex to IMO MSC/Circ. 1047.
   d) The anti-exposure suits must be subjected to an air pressure test at intervals not exceeding three years, or more frequently if the suits are over 10 years of age, in accordance with Guidelines For Periodic Testing Of Immersion Suit And Anti-Exposure Suit Seams And Closure, the Annex to IMO MSC/Circ. 1114.

4 Maintenance of falls
   No modification

5 Spares and repair equipment
   No modification
6 **Weekly inspection**  
No modification  

7 **Monthly inspection**  
No modification  

8 **Servicing of inflatable liferafts, inflatable lifejackets, marine evacuation systems, and maintenance and repair of inflated rescue boats**  
8.1 *(Modification to be considered to allow extended service liferaft or seasonal operation, as appropriate)*  
8.2 **Rotational deployment of marine evacuation systems**  
8.2.1 The interval for the deployment of a marine evacuation system referred by regulation 20.8.2 shall not exceed two (2) years.  
8.3 **No modification**  
8.4 The provisions of regulation 20.8.4 also apply to emergency boat, rigid liferaft and buoyant apparatus.  

9 **Periodic servicing of hydrostatic release units**  
No modification  

10 **Marking of stowage locations**  
No modification  

11 **Periodic servicing of launching appliances and on-load release gear**  
No modification  

**SECTION II – PASSENGER SHIPS (Additional requirements)**  

**Regulation 21 Survival craft and rescue boats**  

1 **Survival craft**  
1.1 Instead to the requirement of regulations 21.1 and 21.2 vessels of Class 2 to 5 may carry the survival craft as set out in the table in section 2.1.  

2 **Rescue boats**  
2.1 Instead to the requirement of regulations 21.1 and 21.2 vessels of Class 2 to 5 may carry the rescue boat, emergency boat as set out in the following table:
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of passenger vessel</td>
<td>Size of passenger vessel or water temperature</td>
<td>Lifeboat (1)</td>
<td>Liferaft</td>
<td>Inflatable rescue platform or buoyant apparatus</td>
<td>Rescue boat (1)</td>
<td>Emergency boat (1)</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>100% POB equally distributed on each side</td>
<td>A minimum of 25% POB (1)</td>
<td>-</td>
<td>≥ 500 GT one on each side &lt; 500 GT one</td>
<td>-</td>
</tr>
<tr>
<td>2 (3)</td>
<td>-</td>
<td>Equally distributed on each side</td>
<td>A minimum of 25% POB equally distributed (1)</td>
<td>-</td>
<td>≥ 500 GT one on each side &lt; 500 GT one</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Vessel of less than 500 GT with less than 200 persons on board</td>
<td>-</td>
<td>100% POB on each side if easily side-to-side transferrable or otherwise 150% POB (12)</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>-</td>
<td>A minimum of 60% POB on each side</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Vessel of &lt; 85 m</td>
<td>-</td>
<td>A minimum of 50% POB on each side</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>3 (3)</td>
<td>-</td>
<td>One or more on each side</td>
<td>One or more on each side</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>100% POB one or more</td>
<td>-</td>
<td>-</td>
<td>1 (7), (8)</td>
</tr>
<tr>
<td>4 (3)</td>
<td>-</td>
<td>Minimum 33.33% POB</td>
<td>One or more (5), (6)</td>
<td>-</td>
<td>1 (7), (8)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>100% POB one or more</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4 (3)</td>
<td>-</td>
<td>One or more</td>
<td>One or more</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4 (3)</td>
<td>-</td>
<td>33.3% POB minimum</td>
<td>One or more (5), (6)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>100% POB one or more</td>
<td>-</td>
<td>-</td>
<td>1 (7), (8)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>-</td>
<td>100% POB one or more</td>
<td>-</td>
<td>1 (7), (8)</td>
<td></td>
</tr>
<tr>
<td>5 (10)</td>
<td>-</td>
<td>A minimum of 66.66% POB</td>
<td>-</td>
<td>-</td>
<td>1 (7), (8)</td>
<td></td>
</tr>
<tr>
<td>5 (10)</td>
<td>-</td>
<td>-</td>
<td>A minimum of 66.66% POB</td>
<td>-</td>
<td>1 (7), (8)</td>
<td></td>
</tr>
<tr>
<td>5 (10)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### VESSEL CONSTRUCTION AND EQUIPMENT REGULATIONS – SUPPLEMENT TO THE SOLAS CONVENTION

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of passenger vessel</td>
<td>Size of passenger vessel or water temperature</td>
<td>Lifeboat (1)</td>
<td>Liferaft</td>
<td>Inflatable rescue platform or buoyant apparatus</td>
<td>Rescue boat (1)</td>
<td>Emergency boat (1)</td>
</tr>
<tr>
<td>5 (3)</td>
<td>(10)</td>
<td>-</td>
<td>One or more</td>
<td>A maximum of 40%POB of buoyant apparatus</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 (3)</td>
<td>(10)</td>
<td>-</td>
<td>-</td>
<td>One or more and a maximum of 40%POB of buoyant apparatus</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes**

1. Must be served by launching appliances or arrangement.
2. In the case of lifeboat, liferaft, inflatable rescue platform and buoyant apparatus %POB means the percentage of the persons on board.
3. The total carrying capacity of survival craft must accommodate the persons on board.
4. Lifeboat must be partially or totally enclosed lifeboat.
5. For each inflatable rescue platform a SART shall be stowed so that it is readily accessible for immediate use on the inflatable rescue platform.
6. For each inflatable rescue platform a survival craft VHF radiotelephone apparatus shall be stowed so that it is readily accessible for immediate use. Where more than two inflatable rescue platform are carry on board the vessel a maximum of two survival craft VHF radiotelephone apparatus are required.
7. The accommodation capacity of an emergency boat or an approved boat may be included in the required liferaft or inflatable rescue platform required capacity.
8. The emergency boat is not required if the vessel has a freeboard of less than 1.5 m or is fitted with a boarding platform.
9. The vessel navigates on a body of water that is no more than 300m wide or has a depth of water not exceeding 1.5 m.
10. Vessel navigating in waters the temperature of which is 15°C or more.
Information note:

The number of liferafts shall be calculated in such a way that, taking into account the percentage of the complement that could be accommodated in each, should any one liferaft be lost or rendered unserviceable, enough liferafts remain on each side of the vessel to accommodate the complement.

3 Marshalling of liferafts

4 Class 2 to 5 vessels are not required to comply with the of regulation 21.3.1

5 Class 1, 4 and 5 vessels are not required to comply with the requirements of regulation 21.3.2.

Regulation 22 Personal life-saving appliances

1 Lifebuoys

1.1 Instead of the requirements of regulation 22.1.1, Class 3 to 5 vessels of the length set out in column 1 of the following table must carry the type and number of lifebuoys set out in columns 2 to 5.

<table>
<thead>
<tr>
<th>Class of Vessel</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length of Vessel</td>
<td>Lifebuoys without lines or self-igniting lights</td>
<td>Lifebuoys with self-igniting lights</td>
<td>Lifebuoys with self-activating smoke signals and self-igniting lights</td>
<td>Lifebuoys with buoyant lifelines</td>
</tr>
<tr>
<td>3</td>
<td>&lt; 50 m</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>≥ 50 m but &lt; 85 m</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>≥ 85 m</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 50 m</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>≥ 50 m but &lt; 85 m</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>≥ 85 m</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>&lt; 50 m</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>≥ 50 m</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

1.2 Class 3, 4 and 5 vessels are not required to comply to with the requirement of regulation 22.1.2.

1.3 In addition to the requirement of Regulation 22.1.2 passenger vessels must have a lifebuoy on each side of each deck accessible to passengers.

1.4 The lifebuoy provided with self-activating smoke signals and self-igniting lights shall be capable of quick release from the navigation bridge.
2 **Lifejackets**

2.1 Class 4 and Class 5 vessels are not required to comply with the requirements of regulation 22.2.1.

3 **Lifejackets lights** *(may also applicable to existing vessels, subject to CBA)*

3.1 Class 2 to 5 vessels that are operating between sunrise and sunset are not required to comply with the requirements of regulation 22.3.1.

3.2 [In the case of a grandfathered vessel to which regulation 22.3 applies, the vessel may carry a minimum of 20%, 40%, 60% and 80% of the lifejackets fitted with a personal locator light in, respectively, the first, second, third and fourth year after the day on which this section comes into force.]

4 **Immersion suits and thermal protective aids**

4.1 In addition to the requirements of regulation 22.4.1, an immersion suit shall be approved as:

a) Having sufficient buoyancy to meet the requirements of 2.3.1 of the LSA Code without a lifejacket and meeting the requirements of 2.3.2.2 of the LSA Code with inherent insulation; or

b) Meeting the requirements of the Canadian General Standards Board standard *CAN/CGSB-65.16-2005 Marine Abandonment Immersion Suit Systems*, as amended.

4.2 Immersion suits referred to in regulation 22.4 must be provided regardless of whether a vessel is constantly engaged on voyages in warm climates.

4.3 [Each immersion suit and] thermal protective aid carried on a vessel must have instructions, in English and French, and diagrams explaining how to put on and use the [suit or] aid. *(Verify if this should be replace by a general requirement for French and English instructions, or addressed in TP 14475)*

5 **Portable battery-powered loud hailer**

5.1 In addition to the requirements of regulation 22, passenger vessels of Class 1 to 5 must carry a portable battery-powered loud hailer at each muster station where more than 100 persons are to be mustered or where a marine evacuation system is used.

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

1.1 In addition to the requirement of regulation 23 means of embarkation for boarding survival craft and rescue boat must be kept ready for immediate use.

1.2 Instead of the means of embarkation into survival craft required in regulation 23, when the embarkation deck is less than [4][4.5] metres above the waterline of the vessel in its lightest seagoing condition, embarkation ladders
in sufficient number [in regard to the number of persons expected to be embarked][to embark all persons in not more than 30 minutes] at the station or stations may be provided.

1.3 Instead of the means of embarkation into survival craft required in regulation 23, when the embarkation deck is [4][4.5] metres or more above the waterline of the vessel in its lightest seagoing condition, a slide or a chute that is an integral part of a marine evacuation system may be provided.

1.4 If a mean of embarkation is provided by a marine evacuation system, there must be at least one on each side of the vessel where a vessel is required to carry liferafts on each side.

1.5 If a marine evacuation system is used, the system must meet the requirements of section 6.2 of Chapter VI of the LSA Code.

1.6 On a sheltered waters voyage or a near coastal voyage, Class 2 limited to 5 miles from shore, a marine evacuation system does not need to meet the requirements of paragraphs 6.2.2.1.4, 6.2.2.5.1 and 6.2.2.5.2 of Chapter VI of the LSA Code, if an embarkation ladder permanently fitted adjacent to the embarkation station is provided in addition to any other embarkation ladder required by this regulation.

1.7 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 meets the requirements of regulation 11.7.

1.8 In addition to embarkation ladders, other means of embarkation shall be provided to enable the safe descent from the embarkation station to survival craft when waterborne of persons of various ages, sizes and physical capabilities wearing lifejackets.[Application of this requirement to existing vessels to be considered]

1.9 If the embarkation station is less than 1 m above the water in the lightest seagoing condition, embarkation ladders or other the means of embarkation are not required.

1.10 A passenger vessel must have appropriate survival craft and rescue boat embarkation arrangements and an evacuation procedure for the safe evacuation of the persons on board within 30 minutes after the abandon-vessel signal or order is given.

**Regulation 24  Stowage of survival craft**

No modification

**Regulation 25  Muster stations**

No modification
Regulation 26  Additional requirements for ro-ro passenger ships
No modification

Regulation 27  Information on passengers

Information note:
Regulation 27 is not incorporated; for the equivalent requirement see 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
Regulations 29.

Regulation 30  Drills

Information note:
Regulation 30 is not incorporated; for the equivalent requirements see the Fire and
Boat Drills Regulations

SECTION III – CARGO SHIPS (Additional requirements)

Regulation 31  Survival craft and rescue boats
1 Survival craft
1.1 Instead of the requirement of regulations 31.1 vessels of Class 7 to 10 may
carry the survival craft as set out in the table in section 31.2.

2 Rescue boats
2.1 Instead of the requirement of regulations 31.2 vessels of Class 7 to 10 may
carry the rescue boat, emergency boat and person overboard retrieval system
as set out in the following table:
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of vessel</td>
<td>Type of vessel</td>
<td>Lifeboat (2)</td>
<td>Liferaft</td>
<td>Rescue boat (2)</td>
<td>Emergency boat (2)</td>
<td>Efficient person overboard retrieval system</td>
</tr>
<tr>
<td>7 and 8</td>
<td>85 m or more other than a tanker</td>
<td>-</td>
<td>100% POB on each side</td>
<td>One on each side (Class 7)</td>
<td>One on each side (Class 8)</td>
<td>-</td>
</tr>
<tr>
<td>7 and 8</td>
<td>Less than 85 m other than a tanker</td>
<td>-</td>
<td>100% POB on each side</td>
<td>One (Class 7)</td>
<td>One (Class 8)</td>
<td>-</td>
</tr>
<tr>
<td>7 and 8 (4)</td>
<td>Other than a tanker</td>
<td>One on each side or a free-fall type</td>
<td>Minimum 25% POB on each side</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7 and 8</td>
<td>Tug</td>
<td>-</td>
<td>100% POB on each side</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Tug of less than 85 m</td>
<td>-</td>
<td>150% POB on each side</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>9 and 10</td>
<td>Vessel</td>
<td>-</td>
<td>100% POB on each side</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>9 and 10</td>
<td>Tug</td>
<td>-</td>
<td>150% POB on each side</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>9 and 10</td>
<td>Tanker</td>
<td>-</td>
<td>100% POB on each side</td>
<td>-</td>
<td>1 rigid (1)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes**

(1) The vessel may instead carry an inflatable emergency boat if the vessel is carrying only bunker oils and marine diesel oils that have a flashpoint of more than 60° C, as determined in a closed-cup test.

(2) Lifeboat, rescue boat and emergency boat must be served by an approved launching appliance or arrangement.

(3) Liferaft %POB means the percentage of the persons on board to be accommodated by the liferafts.

(4) The carrying capacity on each side for lifeboat and liferaft must accommodate the persons on board.

2.2 In addition to the requirements of regulation 31.1.1.4, a Class 7, 8 9 or 10 vessels 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.

2.3 Class 9 and 10 vessels are not required to comply with regulation 31.1.6.

2.4 Class 9 and 10 vessels are not required to comply with regulation 31.1.7.

2.5 Class 8 to 10 vessels are not required to comply with regulation 31.1.8.
### Regulation 32  Personal life-saving appliances

1  **Lifebuoys**

1.1 Instead of the requirements of regulation 32.1.1, Class 7 to 10 vessels of the length set out in column 1 of the following table must carry the type and number of lifebuoys set out in columns 2 to 5.

<table>
<thead>
<tr>
<th>Class of Vessel</th>
<th>Length of Vessel</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lifebuoys without Lines or Self-igniting Lights</td>
<td>Lifebuoys with Self-igniting Lights</td>
<td>Lifebuoys with Self-activating Smoke Signals and Self-igniting Lights</td>
<td>Lifebuoys with Buoyant Lifelines</td>
</tr>
<tr>
<td>7</td>
<td>&lt; 50 m</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>≥ 50 m</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>&lt; 50 m</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>≥ 50 m</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>&lt; 50 m</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>≥ 50 m</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>&lt; 50 m</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>≥ 50 m</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

1.2 The lifebuoy provided with self-activating smoke signals and self-igniting lights shall be capable of quick release from the navigation bridge.

2  **Lifejacket lights**

No modification

3  **Immersion suits**

3.1 Class 10 vessels are not required to comply with the requirements of regulation 32.3.2.

3.2 In addition to the requirements of regulation 32.3, an immersion suit shall be approved as:

   a) having sufficient buoyancy to meet the requirements of 2.3.1 of the LSA Code without a lifejacket and meeting the requirements of 2.3.2.2 of the LSA Code with inherent insulation; or

   b) meeting the requirements of the Canadian General Standards Board standard CAN/CGSB-65.16-2005 Marine Abandonment Immersion Suit Systems, as amended.

3.3 Immersion suits referred to in regulation 32.3 must be provided regardless of whether a vessel is constantly engaged on voyages in warm climates.
3.4 [Each immersion suit carried on a vessel must have instructions, in English and French, and diagrams explaining how to put on and use the suit] {Verify if this should be replace by a general requirement for French and English instructions, or addressed in TP 14475}

Regulation 33 Survival craft embarkation and launching arrangements

No modification

SECTION IV – LIFE-SAVING APPLIANCES AND ARRANGEMENTS REQUIREMENTS

Regulation 34

Information note:

As stated in section 105 of the Regulations in addition to the requirements of the LSA Code and the IMO Resolution MSC.81(70), referred to in Regulations 4 and 34 of Chapter III of SOLAS lifesaving appliances must meet the Canadian modifications set out in TP 14475, as applicable.

SECTION V – MISCELLANEOUS

Regulation 35 Training manual and on-board training aids

1 In addition to the requirements of regulation 35.2 a training manual complying with the requirements of regulation 35.3, where applicable, shall be provided in each crew mess room and recreation room or in each crew cabin or as may be required according to the type of vessel and number of crew.

2 In addition to the requirements of regulation 35.5 training manual shall be written in English or French or both.

Regulation 36 Instructions for on-board maintenance

1 In addition to the requirements of regulation 36 the instructions must be in the working language of the vessel and in English or French or both.

Regulation 37 Muster list and emergency instructions

Information note:

Regulation 37 is not incorporated; for the equivalent requirements see the Fire and Boat Drills Regulations
Part C  Alternative design and arrangements

Regulation 38  Alternative design and arrangements

1  Purpose
No modification

2  General
No modification

3  Engineering analysis
An engineering analysis submitted under regulation 38.3 must be written in English or French.

4  Evaluation of the alternative design and arrangements
No modification (Need to clarify if the evaluation must be done by the MTRB)

5  Exchange of information
No modification

6  Re-evaluation due to change of conditions
No modification
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Title</th>
<th>Information note</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>Radio communications</td>
<td>Chapter IV is not incorporated.</td>
</tr>
<tr>
<td>V</td>
<td>Safety of navigation</td>
<td>Chapter V is not incorporated.</td>
</tr>
<tr>
<td>VI</td>
<td>Carriage of cargoes</td>
<td>Chapter VI is not incorporated.</td>
</tr>
<tr>
<td>VII</td>
<td>Carriage of dangerous goods</td>
<td>For Charter VII refer to IGC code, see section 108 of VCER.</td>
</tr>
<tr>
<td>VIII</td>
<td>Nuclear ships</td>
<td>For application, see section 109 of VCER.</td>
</tr>
<tr>
<td>IX</td>
<td>Management for the safe operation of ships</td>
<td>Chapter IX is not incorporated.</td>
</tr>
</tbody>
</table>
CHAPTER X  Safety measures for high-speed craft

Information note:
For application, see section 110 of VCER.

CHAPTER XI-1  Special measures to enhance maritime safety

Information note:
Chapter XI-I is not incorporated.

CHAPTER XI-2  Special measures to enhance maritime security

Information note:
Chapter XI-2 is not incorporated.

CHAPTER XII  Additional safety measures for bulk carriers

Regulation 1  Definitions

Information note:
Regulation 1 is not incorporated see section 111 of VCER.

Regulation 2  Application
1  Chapter XII does not apply to bulk carriers on inland voyage as per section 111 of VCER.

Regulation 3  Implementation schedule

Information note:
The dates mentioned in the regulation shall be interpreted as the date this regulation comes into force.

Regulation 4  Damaged stability requirements applicable to bulk carriers
No modification

Regulation 5  Structural strength of bulk carriers
No modification
**Regulation 6**  
*Structural and other requirements for bulk carriers*  
No modification

**Regulation 7**  
*Survey and maintenance of bulk carriers*

**Information note:**  
Regulation 7 is not incorporated see section 111 of VCER.

**Regulation 8**  
*Information on compliance with requirements for bulk carriers*

**Information note:**  
Regulation 8 is not incorporated see section 111 of VCER.

**Regulation 9**  
*Requirement for bulk carrier non being capable of complying with regulation 4.3 due to the design configuration of their cargo holds*

**Information note:**  
Regulation 9 is not incorporated see section 111 of VCER.

**Regulation 10**  
*Solid bulk cargo density declaration*

**Information note:**  
Regulation 10 is not incorporated see section 111 of VCER.

**Regulation 11**  
*Loading instrument*

**Information note:**  
Regulation 11 is not incorporated see section 111 of VCER.

**Regulation 12**  
*Hold, ballast and dry space water ingress alarm*  
No modification

**Regulation 13**  
*Availability of pumping systems*  
No modification

**Regulation 14**  
*Restrictions from sailing with any hold empty*

**Information note:**  
Regulation 14 is not incorporated see section 111 of VCER.