Section 10.0

FIRE PROTECTION SYSTEMS

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10.1 Application

10.1.1 This section applies in respect of non-pleasure craft only.

10.2 General

10.2.1 All inboard power-driven non-pleasure craft with an enclosed engine compartment shall have provisions for discharging an extinguishing agent directly into the space immediately surrounding the engine without opening the primary access. Where portable equipment is provided for use with sufficient quantity of extinguishing agent to flood the engine space, a readily accessible port to the enclosure shall be provided that permits the extinguisher to remain upright during discharge. If the access port cannot be positioned so as to allow the portable extinguisher to remain upright, the portable extinguisher shall be equipped with a discharge hose. The port shall be labeled to promptly bring to the attention of the persons on board its fire fighting purpose.

10.3 Means of Escape

- 10.3.1 A minimum of two (2) means of escape shall be provided for accommodation, service, and machinery spaces. The two (2) means of escape shall be as remote from each other as practicable so as to minimize the possibility of one incident blocking both escapes.
- 10.3.2 All common spaces having a deck area of over 28 m² shall have a minimum of two (2) means of escape; where practicable these exits shall have egress to different rooms or spaces to minimize the possibility of one incident blocking both exits.
- 10.3.3 One (1) means of escape is acceptable where;
 - (a) the space is generally unoccupied; or
 - (b) the physical size of the space does not permit two (2) means of escape.

10.4 Fire Detection

10.4.1 Smoke and heat rise detectors shall be provided for sleeping quarters, service, and machinery spaces. For the machinery spaces, the fire alarm system shall be hard-wired to the alarm at the control position in accordance with *Marine Electrical Standards*, TP127, section 21.

- 10.5.1 Spaces protected by a gas smothering system shall be gastight such that leakage of the system will not penetrate accommodation and service spaces.
- 10.5.2 A totally enclosed engine compartment shall be fitted with a fixed fire extinguishing system with sufficient quantity to completely blanket the space. The release device shall be outside of the engine compartment.
- 10.5.3 For carbon dioxide (CO_2) fixed fire extinguishing systems, the amount of CO_2 shall be 40% of the gross volume of the engine compartment, but not less than 2.25 kg (5 lbs). A minimum of 85% of the total volume shall be released in a maximum of two (2) minutes.
- 10.5.4 The engine compartment shall be equipped with at least two (2) portable CO_2 fire extinguishers, or where it cannot be gastight, dry chemical extinguishers, stored at the entrance of the space. Fire extinguishers shall be a minimum 5 lbs and have a rating of type ABC.
- 10.5.5 Requirements for the size and type of portable fire extinguishers to be carried are to be found in the *Small Vessel Regulations* or the *Fire Detection and Extinguishing Equipment Regulations*, as applicable.