

machinery spaces shall be reduced to a minimum consistent with the needs of ventilation and the proper and safe working of the ship.

(3) Skylights shall be of steel and shall not contain glass panels. Suitable arrangements shall be made to permit the release of smoke in the event of fire, from the space to be protected.

(4) In passenger ships, doors other than power-operated watertight doors, shall be so arranged that positive closure is assured in case of fire in the space, by power-operated closing arrangements or by the provision of self-closing doors capable of closing against an inclination of 3.5° opposing closure and having a fail-safe hook-back facility, provided with a remotely operated release device.

(5) Windows shall not be fitted in machinery space boundaries. This does not preclude the use of glass in control rooms within the machinery spaces.

(6) Means of control shall be provided for:

(a) opening and closure of skylights, closure of openings in funnels which normally allow exhaust ventilation, and closure of ventilator dampers;

(b) permitting the release of smoke;

(c) closing power-operated doors or actuating release mechanism on doors other than power-operated watertight doors;

(d) stopping ventilating fans; and

(e) stopping forced and induced draught fans, oil fuel transfer pumps, oil fuel unit pumps and other similar fuel pumps.

(7) The controls required in sub-clause (6) of this clause and in clause 39(2)(e) of this Code shall be located outside the space concerned, where they will not be cut off in the event of fire in the space they serve. In passenger ships such controls shall be situated at one control position or grouped in as few positions as possible to the satisfaction of the Chief Surveyor. Such positions shall have a safe access from the open deck.

(8) When access to any machinery space of category A is provided at a low level from an adjacent shaft tunnel, there shall be provided in the shaft tunnel, near the watertight door, a light steel fire-screen door operable from each side.

(9) For periodically unattended machinery spaces in cargo ships, the Chief Surveyor shall give special consideration to maintaining fire integrity of the machinery spaces, and the required shutdown arrangements (e.g. ventilation, fuel pumps, etc). In passenger ships these requirements shall be at least equivalent to those of machinery spaces normally attended.

**104. Arrangements for Gaseous Fuel for Domestic Purposes**—Where gaseous fuel is used for domestic purposes the arrangements for the storage, distribution and utilisation of the fuel shall be such that, having regard to the hazards of fire and explosion which the use of such fuel may entail, the safety of the ship and the persons on board is preserved.

**105. Miscellaneous Items**—(1) Where “A” class divisions are penetrated for the passage of electric cables, pipes, trunks, ducts, and similar fittings, or for girders, beams or other structural members, arrangements shall be made to ensure that the fire resistance is not impaired, subject to the provisions of clause 75(5) of this Code.

(2) Where “B” class divisions are penetrated for the passage of electric cables, pipes, trunks, ducts and similar fittings or for the fitting of ventilation terminals, lighting fixtures and similar devices, arrangements shall be made to ensure that the fire resistance is not impaired.

(3) Pipes penetrating “A” or “B” class divisions shall be of materials approved by the Chief Surveyor having regard to the temperature such divisions are required to withstand.

(4) Where the Chief Surveyor may permit the conveying of oil and combustible liquids through accommodation and service

spaces, the pipes conveying oil or combustible liquids shall be of a material approved by the Chief Surveyor having regard to the fire risk.

(5) Materials readily rendered ineffective by heat shall not be used for overboard scuppers, sanitary discharges, and other outlets which are close to the waterline and where the failure of the material in the event of fire would give rise to danger of flooding.

(6) Electric radiators, if used, shall be fixed in position and so constructed as to reduce fire risks to a minimum. No such radiators shall be fitted with an element so exposed that clothing, curtains, or other similar materials can be scorched or set on fire by heat from the element.

(7) Cellulose-nitrate based films shall not be used for cinematograph installations.

(8) All waste-receptacles shall be constructed of non-combustible materials with no openings in the sides or bottom.

(9) In spaces where penetration of oil products is possible, the surface of insulation shall be impervious to oil or oil vapours.

**106. Acceptance of Substitutes**—(1) Where in this part of this Code any material or fitting is specified in any ship, any other type of material or fitting may be allowed, provided the Director is satisfied that it is not less effective.

## Part VIII

### Miscellaneous Provisions

**107. Ballasting**—When ballasting with water is necessary, the water ballast should not in general be carried in tanks intended for oil fuel. In ships in which it is not practicable to avoid putting water in oil fuel tanks, approved oily-water separator equipment shall be fitted, or an approved alternative means shall be provided for disposing of the oily-water ballast.

**108. Anchors and Chain Cables**—Every ship shall be provided to the satisfaction of the Chief Surveyor with such anchors and chain cables as are sufficient in number, weight and strength, having regard to the size and intended service of the ship.

**109. Hawsers and Warps**—Every ship shall be provided with such hawsers and warps as are sufficient in number and strength to securely moor the ship, having regard to the size and intended service of the ship.

**110. Means of Escape**—Passenger Ships

(1) Stairways and ladders shall be arranged to provide ready means of escape to the lifeboat and liferaft embarkation deck from all passenger and crew spaces in which the crew is normally employed, other than machinery spaces. In particular, the following provisions shall be complied with:

(a) Below the bulkhead deck two means of escape, at least one of which shall be independent of watertight doors, shall be provided from each watertight compartment or similarly restricted space or group of spaces. Exceptionally the Chief Surveyor may allow one means of escape, due regard being paid to the nature and location of spaces and to the number of persons who might normally be accommodated or employed there.

(b) Above the bulkhead deck there shall be at least two means of escape from each main vertical zone or similarly restricted space or group of spaces at least one of which shall give access to a stairway forming a vertical escape.

(c) If a radiotelegraph station has no direct access to the open deck, two means of escape from or access to such station shall be provided, one of which may be a porthole or window of sufficient size or another means to the satisfaction of the Chief Surveyor.

(d) A corridor or part of a corridor from which there is only one route of escape shall not exceed:

13m in length for ships carrying more than 36