STATUTORY INSTRUMENTS

1998 No. 2515

The Merchant Shipping (Passenger Ship Construction: Ships of Classes III to VI(A)) Regulations 1998

PART VIII

BOILERS AND MACHINERY

General

49.—(1) In every ship the machinery, boilers and other pressure vessels, associated piping systems and fittings shall be of a design and construction adequate for the service for which they are intended and shall be so installed and protected as to reduce to a minimum any danger to persons on board, due regard being paid to moving parts, hot surfaces and other hazards. The design shall have regard to the materials used in construction, the purpose for which the equipment is intended, the working conditions to which it will be subjected and the environmental conditions on board.

(2) Where the arrangements of the main propulsion machinery are unconventional a separate source of propulsion power may be required to give the ship a navigable speed.

(3) The main and auxiliary machinery essential for the propulsion and safety of the ship shall be provided with effective means of control and the machinery shall be capable of being brought into operation when initially no power is available in the ship.

(4) Where risk from over-speeding of machinery would otherwise exist, two independent means of control shall be provided to ensure that the safe speed is not exceeded; provided that a single means of limiting the speed of machinery may be permitted where it can be shown that the safety of the ship will not be impaired.

(5) Where main or auxiliary machinery or any parts of such machinery are subject to internal pressure, those parts shall, before being put into service for the first time, be subjected to a hydraulic test to a pressure suitably in excess of the working pressure having regard to—

(a) the design and the material of which they are constructed;

(b) the purpose for which they are intended to be used; and

(c) the working conditions under which they are intended to be used;

and such parts shall be maintained in an efficient condition.

Additional requirements for ships constructed on or after 1st September 1984

(6) Access shall be provided to facilitate the cleaning, inspection and maintenance of main propulsion and auxiliary machinery including boilers and pressure vessels.

(7) In every ship means shall be provided whereby the normal operation of propulsion machinery can be sustained or restored when there is a breakdown of—

(a) a generating set which serves as a main source of electrical power;

(b) the sources of steam supply;

(c) the boiler feed water systems;

(d) the fuel oil supply systems for boilers and engines;

(e) the sources of lubricating oil pressure;

(f) the sources of water pressure;

(g) a condensate pump and the arrangements to maintain vacuum in condensers;

(h) the mechanical air supply for boilers;

(i) an air compressor and receiver for starting or control purposes;

(j) the hydraulic, pneumatic or electrical means for control of main propulsion machinery including controllable pitch propeller; or

(k) any other auxiliary system essential for propulsion.

A partial reduction in propulsion capability from normal operation may be permitted if it can be shown that the safety of the ship will not be impaired.

(8) In any ship the main propulsion machinery and all auxiliary machinery essential to the propulsion and the safety of the ship shall be designed to operate when the ship is upright and when inclined at any angle of list up to and including 15 degrees either way under static conditions and 22.5 degrees either way under dynamic conditions (rolling) and simultaneously inclined dynamically (pitching) 7.5 degrees by bow or stern. A reduction in these angles taking into consideration the type, size and service conditions of the ship may be permitted by the Certifying Authority.