

## REGULATION XVIII

*Exits from Watertight Compartments*

(1) In passenger and crew spaces, practicable means of exit to the open deck shall be provided for the occupants from each watertight compartment.

(2) Practicable means of escape for the crew shall be provided from each engine room, shaft tunnel, stokehold compartment, and other working spaces independent of watertight doors.

## REGULATION XIX

*Pumping Arrangements**Steamships*

(1) Ships shall be provided with an efficient pumping plant capable of pumping from and draining any watertight compartment under all practicable conditions after a casualty whether the ship is upright or listed. For this purpose wing suction will generally be necessary except in narrow compartments at the ends of the ship. Where close ceiling is fitted over the bilges, arrangements shall be made whereby water in the compartment may find its way to the suction pipes. Efficient means shall be provided for draining water from insulated holds.

(2) In addition to the ordinary bilge pump, worked by the main engines, or its equivalent engine room pump, two independent power bilge pumps shall be provided, except that in ships less than 300 feet (91.5 metres) in length, having a criterion numeral less than 30, either two efficient hand pumps of the crank type fitted one forward and one aft, or a portable power pump, may be substituted for one of the additional independent power bilge pumps.

Sanitary, ballast and general service pumps may be accepted as independent power bilge pumps if fitted with the necessary connections to the bilge pumping system.

(3) Where two or more independent power pumps are required, the arrangement shall be such that at least one power pump will be available for use in all ordinary circumstances in which a vessel may be flooded at sea. One of the power pumps, shall, therefore, be an emergency pump of a reliable submersible type. A source of power situated above the bulkhead deck shall be available for this pump in any case of emergency.

(4) Where practicable, the power bilge pumps shall be placed in separate watertight compartments so arranged or situated that these compartments will not readily be flooded by the same damage. If the engines and boilers are in two or more watertight compartments, the pumps available for bilge service shall be distributed through these compartments as far as is possible.

(5) With the exception of pumps which may be provided for peak compartments only, each bilge pump, whether operated by hand or by power, shall be arranged to draw water from any hold or machinery compartment in the ship.

(6) Each independent power bilge pump shall be capable of giving a speed of water through the main bilge pipe of not less than 400 feet (122 metres) per minute, and it shall have a separate direct suction, to the compartment in which it is situated, of a diameter not less than that of the bilge main. The direct suction from each independent power bilge pump shall be arranged to pump from either side of the ship.