

$$F = A - \frac{(A - B)(C_s - 23)}{100} \quad \text{F5}$$

Nevertheless, where the criterion numeral is equal to 45 or more and simultaneously the computed factor of subdivision as given by formula F5 is .65 or less, but more than .50, the subdivision abaft the forepeak shall be governed by the factor .50.

(b) Where the factor F is less than .40 and it is shown to the satisfaction of the Chief Surveyor to be impracticable to comply with the factor F in a machinery compartment of the ship, the subdivision of such compartment may be governed by an increased factor, which, however, shall not exceed .40.

(c) The subdivision abaft the forepeak of ships of less than 131m but not less than 79m in length having a criterion numeral equal to S, where:

$$S = \frac{3,574 - 25L}{13}$$

shall be governed by the factor unity; of those having a criterion numeral of 123 or more by the factor B given by the formula F2; of those having a criterion numeral between S and 123 by the factor F obtained by linear interpolation between unity and the factor B using the formula:

$$F = 1 - \frac{(1 - B)(C_s - S)}{123 - S}$$

(d) The subdivision abaft the forepeak of ships of less than 131m but not less than 79m in length and having a criterion numeral less than S, and of ships of less than 79m in length shall be governed by the factor unity, unless, in either case, it is shown to the satisfaction of the Chief Surveyor to be impracticable to comply with this factor in any part of the ship, in which case, the Chief Surveyor may allow such relaxation as may appear to be justified, having regard to all the circumstances.

(e) The provisions of sub-clause (3)(d) of this clause shall apply also to ships of whatever length, which are to be certified to carry a number of passengers exceeding 12 but not exceeding—

$$\frac{L^2}{650} \text{ or } 50, \text{ whichever is the less.}$$

8. Special Requirements Concerning Subdivision—(1) Where in a portion or portions of a ship the watertight bulkheads are carried to a higher deck than in the remainder of the ship and it is desired to take advantage of this higher extension of the bulkheads in calculating the floodable length, separate margin lines may be used for each such portion of the ship provided that:

(a) the sides of the ship are extended throughout the ship's length to the deck corresponding to the upper margin line and all openings in the shell plating below this deck throughout the length of the ship are treated as being below a margin line, for the purposes of Clause 14 of this Code and

(b) the two compartments adjacent to the "step" in the bulkhead deck are each within the permissible length corresponding to their respective margin lines, and, in addition, their combined length does not exceed twice the permissible length based on the lower margin line.

(2) A compartment may exceed the permissible length determined by Clause 7 of this Code provided the combined length of each pair of adjacent compartments shall be adjusted to the mean average permeability of the two portions of the ship in which the compartments are situated.

(3) Where the two adjacent compartments have different factors of subdivision, the combined length of the two compartments shall be determined proportionately.

(4) In ships of 100m in length and upwards, one of the main transverse bulkheads abaft the forepeak shall be fitted at a distance from the forward perpendicular which is not greater than the permissible length.

(5) A main transverse bulkhead may be recessed provided that all parts of the recess lie inboard of vertical surfaces on both

sides of the ship, situated at a distance from the shell plating equal to one-fifth the breadth of the ship, and measured at right angles to the centreline at the level of the deepest subdivision load line. Any part of a recess which lies outside these limits shall be dealt with as a step in accordance with sub-clause 6 of this clause.

(6) A main transverse bulkhead may be stepped provided that it meets one of the following conditions:

(a) the combined length of the two compartments, separated by the bulkhead in question, does not exceed either 90 per cent of the floodable length or twice the permissible length, except that, in ships having a factor of subdivision greater than .9, the combined length of the two compartments in question shall not exceed the permissible length;

(b) additional subdivision is provided in way of the step to maintain the same measure of safety as that secured by a plane bulkhead;

(c) the compartment over which the step extends does not exceed the permissible length corresponding to a margin line taken 76mm below the step.

(7) Where a main transverse bulkhead is recessed or stepped, an equivalent plane bulkhead shall be used in determining the subdivision.

(8) If the distance between two adjacent main transverse bulkheads, or their equivalent plane bulkheads, or the distance between the transverse planes passing through the nearest stepped portions of the bulkheads, is less than 3.0m plus 3 per cent of the length of the ship, or 11.0m whichever is the less, only one of these bulkheads shall be regarded as forming part of the subdivision of the ship in accordance with the provisions of clause 7 of this Code.

(9) Where a main transverse watertight compartment contains local subdivision and it can be shown to the satisfaction of the Chief Surveyor that, after any assumed side damage extending over a length of 3.0m plus 3 per cent of the length of the ship, or 11.0m whichever is the less, the whole volume of the main compartment will not be flooded, a proportionate allowance may be made in the permissible length otherwise required for such compartment. In such a case the volume of effective buoyancy assumed on the undamaged side shall not be greater than that assumed on the damaged side.

(10) Where the required factor of subdivision is .50 or less, the combined length of any two adjacent compartments shall not exceed the floodable length.

9. Peak and Machinery Space Bulkheads, Shaft Tunnels etc—(1) A forepeak or collision bulkhead shall be fitted which shall be watertight up to the bulkhead deck. This bulkhead shall be located at a distance from the forward perpendicular of not less than 5 per cent of the length of the ship and not more than 3m plus 5 per cent of the length of the ship.

(2) Where any part of the ship below the waterline extends forward of the forward perpendicular, e.g. a bulbous bow, the distances stipulated above shall be measured from a point either:

(a) at the mid-length of such extension; or

(b) at a distance 1.5 per cent of the length of the ship forward of the forward perpendicular; or

(c) at a distance 3m forward of the forward perpendicular; whichever gives the smallest measurement.

(3) Where a long forward superstructure is fitted, the forepeak or collision bulkhead shall be extended weathertight to the deck next above the bulkhead deck. The extension need not be fitted directly above the bulkhead below provided it is located within the limits specified in sub-clauses (1) or (2) of this clause with the exemption permitted by sub-clause (4) of this clause and the part of the deck which forms the step is made effectively weathertight.

(4) Where bow doors are fitted and a sloping loading ramp