(4) Where a portion of an assumed margin line is appreciably below the deck to which bulkheads are carried, the Chief Surveyor may permit a limited relaxation in the watertightness of those portions of the bulkheads which are above the margin line and immediately under the higher deck.

6. Permeability—(1) The definite assumptions referred to in Clause 5 of this Code relate to the permeability of the spaces below the margin line.

(2) In determining the floodable length, a uniform average permeability shall be used throughout the whole length of each of the following portions of the ship below the margin line:

(a) the machinery space;

(b) the portion forward of the machinery space; and

(c) the portion abaft the machinery space.

(3) The uniform average permeability throughout the machinery space shall be determined from the formula:

$$85 + 10 \left[\frac{a - c}{v} \right]$$

where: a = the volume of the passenger spaces as defined in clause 1 of this Code, which are situated below the margin line within the limits of the machinery space;

c = the volume of between-deck spaces below the margin line within the limits of the machinery space which are appropriated to cargo, coal or stores;

v = the whole volume of the machinery space below the margin line.

(4) Where it is shown to the satisfaction of the Chief Surveyor that the average permeability as determined by detailed calculation is less than that given by the formula, the detailed calculated value may be used. For the purpose of such calculation, the permeability of passenger spaces shall be taken as 95, that of all cargo, coal and store spaces as 60, and that of double bottom, oil fuel and other tanks at such value as may be approved by the Chief Surveyor in each case.

(5) The uniform average permeability throughout the portion of the ship forward of or abaft the machinery space shall be determined from the formula:

$$63 + 35 \frac{a}{v}$$

where: a = the volume of the passenger spaces as defined in clause 1 of this Code, which are situated below the margin line, forward of or abaft the machinery space; and

v = the whole volume of the portion of the ship below the margin line forward of or abaft the machinery space.

(6) In the case of unusual arrangements the Chief Surveyor may allow, or require, a detailed calculation of average permeability for the portions forward of or abaft the machinery space. For the purpose of such calculation, the permeability of passenger spaces shall be taken as 95, that of spaces containing machinery as 85, that of all cargo, coal and store spaces as 60, and that of double bottom, oil fuel and other tanks at such value as may be approved by the Chief Surveyor in each case.

(7) Where a between-deck compartment between two watertight transverse bulkheads contains any passenger or crew space, the whole of that compartment, less any space completely enclosed within permanent steel bulkheads and appropriated to other purposes, shall be regarded as passenger space. Where, however, the passenger or crew space in question is completely enclosed within permanent steel bulkheads, only the space so enclosed need be considered as passenger space.

7. Permissible Length of Compartments— Ships shall be as efficiently subdivided as is possible having regard to the nature of the service for which they are intended. The degree of subdivision shall vary with the length of the ship and with the nature of the service, such that the highest degree of subdivision corresponds with ships of greatest length primarily engaged in the carriage of passengers.

(1) Factor of subdivision

(a) The maximum permissible length of a compartment having its centre at any point in the ship's length is obtained from the floodable length by multiplying the latter by an appropriate factor called the factor of subdivision.

(b) The factor of subdivision shall depend on the length of the ship, and for a given length shall vary according to the nature of the service for which the ship is intended. It shall decrease in a regular and continuous manner—

(i) as the length of the ship increases, and

(ii) from a factor A, applicable to ships primarily engaged in the carriage of cargo, to a factor B, applicable to ships primarily engaged in the carriage of passengers.

(c) The variations of factors A and B shall be expressed by the following formulae F1 and F2 where L is the length of the ship as defined in clause 1.

$$A = \frac{58.2}{L - 60} + .18 \text{(L = 131m and upwards)} \quad F1$$

$$B = \frac{30.3}{L - 42} + .18 \text{(L = 79m and upwards)} \quad F2$$

(2) Criterion of Service

(a) For a ship of given length the appropriate factor of subdivision shall be determined by the criterion of service numeral (hereinafter called the criterion numeral) as given by the following formulae F3 and F4 where:

C_s = the criterion numeral;

L = the length of the ship (metres),

M = the volume of the machinery space (cubic metres), with the addition thereto of the volume of any permanent oil fuel bunkers which may be situated above the inner bottom and forward of or abaft the machinery space;

P = the whole volume of the passenger spaces below the margin line (cubic metres),

V = the whole volume of the ship below the margin line (cubic metres);

P_1 = KN where:

N = the number of passengers for which the ship is to be certified, and

K = 0.056L

Where the value of KN is greater than the sum of P and the whole volume of the actual passenger spaces above the margin line, the figure to be taken as P_1 is that sum or two-thirds KN, whichever is the greater.

When P_1 is greater than P—

$$C_s = 72 \frac{M + 2P_1}{V + P_1 - P} \quad F3$$

and in other cases—

$$C_s = 72 \frac{M + 2P}{V} \quad F4$$

For ships not having a continuous bulkhead deck the volumes are to be taken up to the actual margin lines used in determining the floodable lengths.

(3) Rules for Subdivision of Ships

(a) The subdivision abaft the forepeak of ships of 131m in length and upwards having a criterion numeral of 23 or less shall be governed by the factor A given by formula F1; of those having a criterion numeral of 123 or more by the factor B given by formula F2; and of those having a criterion numeral between 23 and 123 by the factor F obtained by linear interpolation between the factors A and B, using the formula: