2.2.10 Air pipes

2.2.10.1 *Main storage tanks containing flammable liquids or tanks which can be pumped or filled from the sea shall have air pipes which do not terminate in enclosed spaces.*

2.2.10.2 *All air pipes extending to exposed decks shall have a height from the deck to the point where water may have access below of at least 300 mm where the deck is less than 0.05L above the design waterline, and 150 mm on all other decks.*

2.2.10.3 *Air pipes may discharge through the side of the superstructure provided that this is at a height of at least 0.02L above any waterline when the intact craft is heeled to an angle of 15° or 0.02L above the highest waterline at all stages of flooding as determined by the damaged stability calculations, whichever is higher.*

2.2.10.4 *All air pipes shall be equipped with weathertight closing devices that close automatically.*

2.2.11 Freeing ports

2.2.11.1 *Where bulwarks on weather decks form wells, ample provision shall be made for rapidly freeing the decks of water and for draining them. The minimum freeing port area (A) on each side of the craft for each well on the weather deck of the main hull(s) shall be:*

.1 *where the length of bulwark (l) in the well is 20 m or less:*

$$A = 0.7 + 0.035\ l\ (m^2);\ \text{and}$$

.2 *where l exceeds 20 m:*

$$A = 0.07l\ (m^2),$$

and, in no case, l need be taken as greater than 0.7L.

If the bulwark is more than 1.2 m in average height, the required area shall be increased by 0.004 m^2 per metre of length of well for each 0.1 m difference in height. If the bulwark is less than 0.9 m in average height, the required area shall be decreased by 0.004 m^2 per metre of length of well for each 0.1 m difference in height.

2.2.11.2 *Such freeing ports shall be located within the height of 0.6 m above the deck and the lower edge shall be within 0.02 m above the deck.*

2.2.11.3 *All such openings in the bulwarks shall be protected by rails or bars spaced approximately 230 mm apart. If shutters are fitted to freeing ports, ample clearance shall be provided to prevent jamming. Hinges shall have pins or bearings of non-corrodible material. If shutters are fitted with securing appliances, these appliances shall be of approved construction.*

2.2.11.4 *Craft, having superstructures which are open in front or both ends, shall comply with the provisions of 2.2.11.1.*

2.2.11.5 *In craft, having superstructures which are open at the aft end, the minimum freeing port area shall be:*

$$A = 0.3b\ (m^2)$$

where:

b = the breadth of the craft at the exposed deck (m).

2.2.11.6 *Ro-ro craft fitted with bow loading openings leading to open vehicle spaces shall comply with the provisions of 2.2.3.*

2.3 Intact Stability in the Displacement Mode

2.3.1 *Hydrofoil craft fitted with surface-piercing foils and/or fully submerged foils shall have sufficient stability under all permitted cases of loading to comply with the relevant provisions of annex 6 and specifically maintain a heel angle of less than 10º when subjected to the greater of the heeling moments in 1.1.2 and 1.1.4 of that annex.*

2.3.2 *Subject to 2.3.4, multihull craft other than hydrofoil craft shall meet the relevant requirements of annex 7 in all permitted cases of loading.*

2.3.3 *Subject to 2.3.4, monohull craft other than hydrofoil craft shall meet the relevant requirements of annex 8 in all permitted conditions of loading.*

2.3.4 *Where the characteristics of multihull craft are inappropriate for application of annex 7 or the characteristics of monohull craft are inappropriate for application of annex 8, the Administration may accept alternative criteria equivalent to those stipulated, as appropriate to the type of craft and area of operation. The requirements of annexes 7 and 8 may be applied as indicated in the table below.*

Table 2.3.4 Application of annexes 7 and 8 to monohull and multihull craft

GM_T	Angle of maximum GZ	
	≤ 25°	> 25°
≤ 3 m	annex 7 or annex 8	annex 8
> 3 m	annex 7	annex 7 or annex 8

where:

GM_T = *transverse metacentric height in the loading condition corresponding to the design waterline, corrected for free surface effects (m)*

GZ = *righting lever*

2.4 Intact Stability in the Non-Displacement Mode

2.4.1 *The requirements of this section and of 2.12 shall be applied on the assumption that any stabilization systems fitted are fully operational.*

2.4.2 *The roll and pitch stability on the first and/or any other craft of a series shall be qualitatively assessed during operational safety trials as required by Sections 17 and 18 and annex 9. The results of such trials may indicate the need to impose operational limitations.*

2.4.3 *Where craft are fitted with surface-piercing structure or appendages, precautions shall be taken against dangerous attitudes or inclinations and loss of stability subsequent to a collision with a submerged or floating object.*

2.4.4 *In designs where periodic use of cushion deformation is employed as a means of assisting craft control, or periodic use of cushion air exhausting to atmosphere for purposes of craft manoeuvring, the effects upon cushion-borne stability shall be determined, and the limitations on the use by virtue of craft speed or attitude shall be established.*

2.4.5 *In the case of an air cushion vehicle fitted with flexible skirts, it shall be demonstrated that the skirts remain stable under operational conditions.*

2.5 Intact Stability in the Transitional Mode

2.5.1 *Under weather conditions up to the worst intended conditions, the time to pass from the displacement mode to the non-displacement mode and vice versa shall be minimised unless it is demonstrated that no substantial reduction of stability occurs during this transition.*

2.5.2 *Hydrofoil craft shall comply with the relevant provisions of annex 6.*

2.6 Buoyancy and Stability in the Displacement Mode following Damage

2.6.1 *The requirements of this Section apply to all permitted conditions of loading.*

2.6.2 *For the purpose of making damage stability calculations, the volume and surface permeabilities shall be, in general, as follows:*

Spaces	***Permeability***
Appropriated to cargo or stores	*60*
Occupied by accommodation	*95*
Occupied by machinery	*85*
Intended for liquids	*0 or 95* [4]
Appropriated for cargo vehicles	*90*
Void spaces	*95*

2.6.3 *Notwithstanding 2.6.2, permeability determined by direct calculation shall be used where a more onerous condition results, and may be used where a less onerous condition results from that provided according to 2.6.2.*

2.6.4 *The Administration may permit the use of low-density foam or other media to provide buoyancy in void spaces, provided that satisfactory evidence is provided that any such proposed medium is the most suitable alternative and is:*

.1 *of closed-cell form if foam, or otherwise impervious to water absorption;*

.2 *structurally stable under service conditions;*

.3 *chemically inert in relation to structural materials with which it is in contact or other substances with which the medium is likely to be in contact (reference is made to 7.4.3.7); and*

.4 *properly secured in place and easily removable for inspection of the void spaces.*

2.6.5 *The Administration may permit void bottom spaces to be fitted within the watertight envelope of the hull without the provision of a bilge system or air pipes provided that:*

.1 *the structure is capable of withstanding the pressure head after any of the damages required by this section;*

.2 *when carrying out a damage stability calculation in accordance with the requirements of this section, any void space adjacent to the damaged zone shall be included in the calculation and the criteria in 2.6, 2.13 and 2.15 complied with;*

.3 *the means by which water which has leaked into the void space is to be remove d shall be included in the craft operating manual required by Section 18; and*

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[4] *whichever results in the more severe requirements*

.4 *adequate ventilation is provided for inspection of the space under consideration as required by 2.2.1.2.*

.5 *void spaces filled with foam or modular buoyancy elements or any space without a venting system are considered to be void spaces for the purposes of this paragraph, provided such foam or elements fully comply with 2.6.4.*

2.6.6 *Any damage of a lesser extent than that postulated in 2.6.7 to 2.6.10, as applicable, which would result in a more severe condition shall also be investigated.*

2.6.7 Extent of side damage

The following side damage shall be assumed anywhere on the periphery of the craft:

.1 *the longitudinal extent of damage shall be 0.75 $\nabla^{1/3}$, or (3 m + 0.225 $\nabla^{1/3}$), or 11 m, whichever is the least;*

.2 *the transverse extent of penetration into the craft shall be 0.2 $\nabla^{1/3}$. However, where the craft is fitted with inflated skirts or with non-buoyant side structures, the transverse extent of penetration shall be at least 0.12 $\nabla^{1/3}$ into the main buoyancy hull or tank structure; and*

.3 *the vertical extent of damage shall be taken for the full vertical extent of the craft,*

where:

∇ = *volume of displacement corresponding to the design waterline (m^3).*

The damage described in this paragraph shall be assumed to have the shape of a parallelepiped. [5] Applying this to figure 2.6.7 a, the inboard face at its mid-length shall be tangential to, or otherwise touching in a least 2 places, the surface corresponding to the specified transverse extent of penetration, as illustrated in figure 2.6.7 a.

Side damage shall not transversely penetrate a greater distance than the extent of 0.2 $\nabla^{1/3}$ at the design waterline, except where a lesser extent is provided for in 2.6.7.2. Refer to figures 2.6.7b and c.

If considering a multihull, the periphery of the craft is considered to only be the surface of the shell encompassed by the outboard surface of the outermost hull at any given section.

2.6.8 Extent of bow and stern damage

2.6.8.1 *The following extents of damage are to be applied to bow and stern, as illustrated in figure 2.6.8:*

.1 *at the fore end, damage to the area defined as A_{bow} in 4.4.1, the aft limit of which being a transverse vertical plane, provided that this area need not extend further aft from the forward extremity of the craft's watertight envelope than the distance defined in 2.6.7.1; and*

.2 *at the aft end, damage to the area aft of a transverse vertical plane at a distance 0.2 $\nabla^{1/3}$ forward of the aft extremity of the watertight envelope of the hull.*

2.6.8.2 *The provisions of 2.6.6 in relation to damage of lesser extent remain applicable to such damage.*

2.6.9 *Extent of bottom damage in areas vulnerable to raking damage*

2.6.9.1 Application

.1 *Any part of the surface of the hull(s) is considered to be vulnerable to raking damage if:*

.1 it is in contact with the water at 90 % of maximum speed in smooth water, and

.2 it also lies below two planes which are perpendicular to the craft centreline plane and at heights as shown in figure 2.6.8.1. For multihulls, individual hulls shall be considered separately.

.2 *Raking damage shall be assumed to occur along any fore-and-aft line on the surface of the hull(s) between the keel and the upper limit defined in the figure below:*

.3 *Damage shall not be applied at the same time as that defined in 2.6.7 or 2.6.9.*

where:

T = maximum draught of the hull (each hull considered individually in the case of multihulls) to the design waterline, excluding any no buoyant structure, provided that structures such as single plate skegs or solid metal appendages shall be considered to be non-buoyant and thus exluded.

2.6.9.2 Extent

2.6.9.2.1 *Two different longitudinal extents shall be considered separately:*

.1 55 % of the length L, measured from the most forward point of the underwater buoyant volume of each hull; and

.2 a percentage of the length L, applied anywhere in the length of the craft, equal to 35 % for craft where L = 50 m and over and equal to (L/2 + 10) % for craft where L is less than 50 m.

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[5] *A parallelepiped is defined as "a solid contained by parallelograms" and a parallelogram is defined as "a four-sided rectilinear figure whose opposite sides are parallel".*

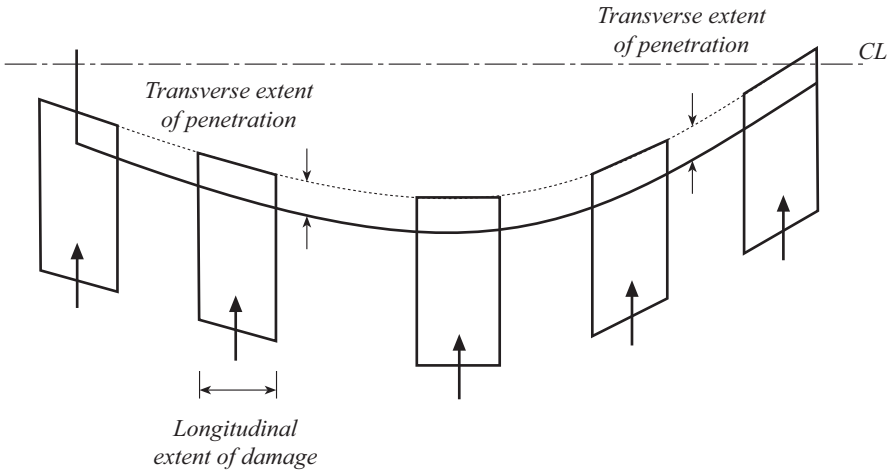

Figure 2.6.7 a

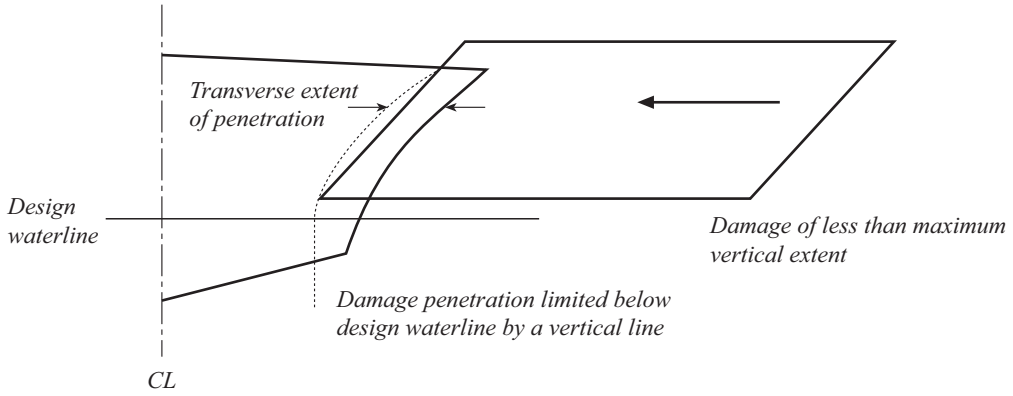

Figure 2.6.7 b

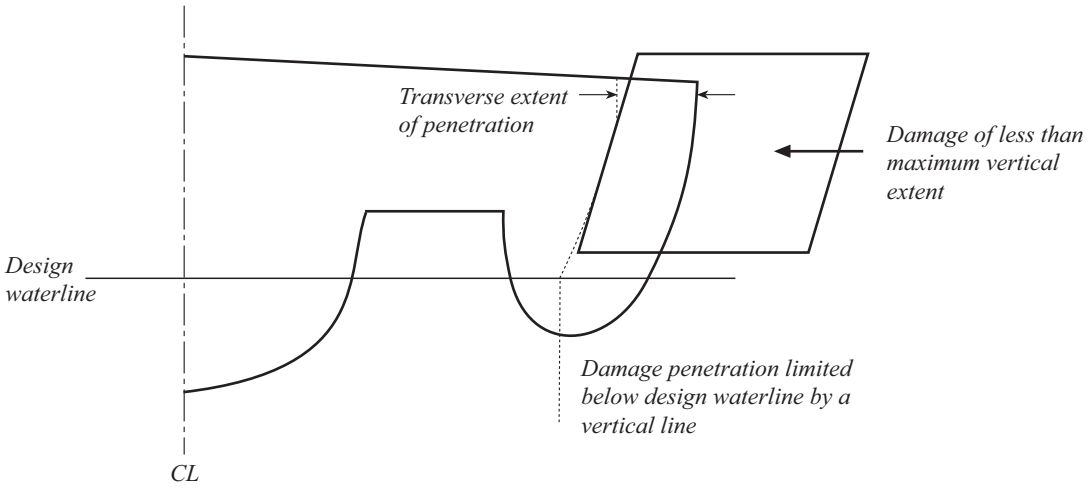

Figure 2.6.7 c

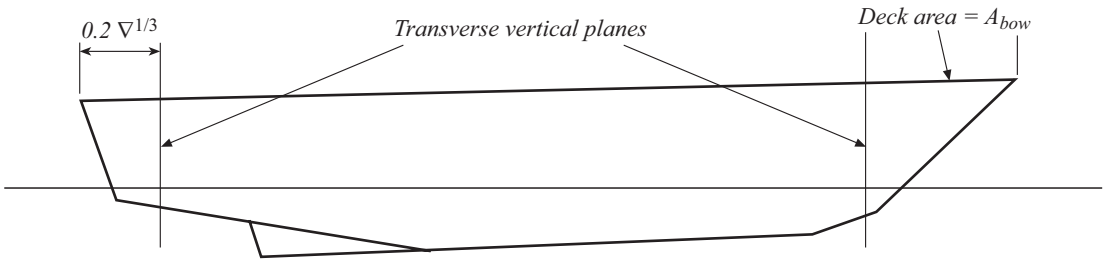

Figure 2.6.8

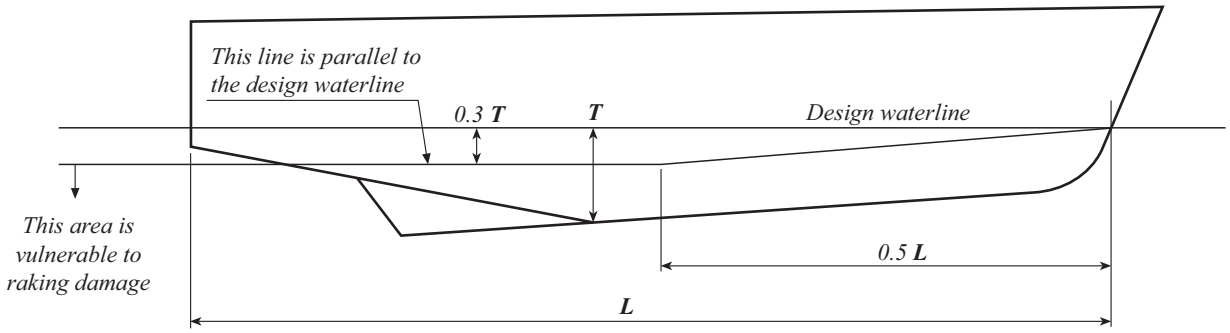

Figure 2.6.8.1

2.6.9.2.2 *Except as provided below, the penetration normal to the shell shall be 0.04 $\nabla^{1/3}$ or*

0.5 m, whichever is the lesser, in association with a girth along the shell equal to 0.1 $\nabla^{1/3}$, where ∇ is the volume of displacement corresponding to the design waterline (m^3). However this penetration or girth shall under no circumstances extend above the vertical extent of the vulnerable area as specified in 2.6.8.1.1.

2.6.9.2.3 *The shape of damage shall be assumed to be rectangular in the transverse plane as illustrated in figure 2.6.9.2 below. Damage is to be assumed at a series of sections within the defined longitudinal extent in accordance with figure 2.6.9.2, the mid-point of the damaged girth being maintained at a constant distance from the centreline throughout that longitudinal extent.*

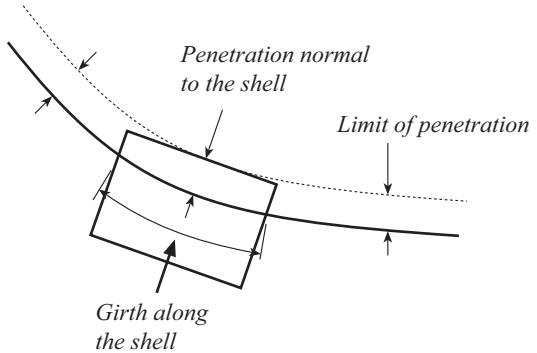

Figure 2.6.9.2

2.6.10 Extent of bottom damage in areas not vulnerable to raking damage

2.6.10.1 Application

This applies to all parts of the hull(s) below the design waterline which are not defined as vulnerable to raking damage in 2.6.8.1. Damage shall not be applied at the same time as that defined in 2.6.7 or 2.6.8.

2.6.10.2 Extent

The following extent of damage shall be assumed:

.1 *the length of damage in the fore-and-aft direction shall be 0.75 $\nabla^{1/3}$, or (3 m + 0.225 $\nabla^{1/3}$), or 11 m whichever is the least;*

.2 *the athwartships girth of damage shall be 0.2 $\nabla^{1/3}$; and*

.3 *the depth of penetration normal to the shell shall be 0.02 $\nabla^{1/3}$, where:*

∇ = volume of displacement corresponding to the design waterline (m^3).

.4 *the shape of damage shall be assumed to be rectangular in the plane of the shell of the craft, and rectangular in the transverse plane as illustrated in figure 2.6.9.2.*

2.6.11 *In applying 2.6.8 and 2.6.9 to multihull craft, an obstruction at or below the design waterline of up to 7 m width shall be considered in determining*

the number of hulls damaged at any one time. The requirement of 2.6.6 shall also be applied.

2.6.12 *Following any of the postulated damages detailed in 2.6.6 to 2.6.10, the craft in still water shall have sufficient buoyancy and positive stability to simultaneously ensure that:*

.1 *for all craft other than amphibious air-cushion vehicles, after flooding has ceased and a state of equilibrium has been reached, the final waterline is below the level of any opening through which further flooding could take place by at least 50 % of the significant wave height corresponding to the worst intended conditions;*

.2 *for amphibious air-cushio n vehicles, after flooding has ceased and a state of equilibrium has been reached, the final waterline is below the level of any opening through which further flooding could take place by at least 25 % of the significant wave height corresponding to the worst intended conditions;*

.3 *there is a positive freeboard from the damage waterline to survival craft embarkation positions;*

.4 *essential emergency equipment, emergency radios, power supplies and public address systems needed for organizing the evacuation remain accessible and operational;*

.5 *the residual stability of craft meets the appropriate criteria as laid out in annexes 7 and 8 according to table 2.3.4. Within the range of positive stability governed by the criteria of annexes 7 or 8, no unprotected opening shall be submerged.*

2.6.13 *Downflooding openings referred to in 2.6.11.1 and 2.6.11.2 shall include doors and hatches which are used for damage control or evacuation procedures, but may exclude those which are closed by means of weathertight doors and hatch covers and not used for damage control or evacuation procedures.*

2.7 Inclining and Stability Information

2.7.1 *Every craft, on completion of build, shall be inclined and the elements of its stability determined. When an accurate inclining is not practical, the lightweight displacement and centre of gravity shall be determined by a lightweight survey and accurate calculation.*

2.7.2 *On all craft, where an accurate inclining experiment is impractical owing to the height of the centre of gravity (VCG or KG) being less than one third of the transverse metacentric height (GM_T), the Administration may accept estimation of KG by detailed calculation in place of an inclining experiment. In such cases, a displacement check shall be undertaken to confirm the calculated lightship characteristics, including LCG, which may be accepted if the measured lightship displacement and LCG are respectively within 2 % and 1 % L relative to the estimate.*

2.7.3 *The master shall be supplied by the owner with reliable information relating to the stability of the craft in accordance with the following provisions of this paragraph. The information relating to stability shall , before issued to the master, be submitted to the Administration for approval, together with a copy thereof for their retention, and shall incorporate such additions and amendments as the Administration may in any particular case require.*

2.7.4 *Where any alterations are made to a craft so as significantly to affect the stability information supplied to the master, amended stability information shall be provided. If necessary the craft shall be re-inclined.*

2.7.5 *A report of each inclining or lightweight survey carried out in accordance with this Section and of the calculation therefrom of the lightweight condition particulars shall be submitted to the Administration for approval, together with a copy for their retention. The approved report shall be placed on board the craft by the owner in the custody of the master and shall incorporate such additions and amendments as the Administration may in any particular case require. The amended lightweight condition particulars so obtained from time to time shall be used by the master in substitution for such previously approved particulars when calculating the craft's stability.*

2.7.6 *Following any inclining or lightweight survey, the master shall be supplied with amended stability information if the Administration so requires. The information so supplied shall be submitted to the Administration for approval, together with a copy thereof for their retention, and shall incorporate such additions and amendments as the Administration may in any particular case require.*

2.7.7 *Stability information demonstrating compliance with this Section shall be furnished in the form of a stability information book which shall be kept on board the craft at all times in the custody of the master. The information shall include particulars appropriate to the craft and shall reflect the craft loading conditions and mode of operation. Any enclosed superstructures or deck-houses included in the cross curves of stability and the critical downflooding points and angles shall be identified. At the operating station there shall be plans showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein with their means of closure and position of any controls thereof. For amphibious air-cushion vehicles this may be achieved*

by the use of draught gauges in conjunction with deck datum plates.

2.7.8 *Every craft shall have scales of draughts marked clearly at the bow and stern. In the case where the draught marks are not located where they are easily readable, or operational constraints for a particular trade make it difficult to read the draught marks, then the craft shall also be fitted with a reliable draught-indicating system by which the bow and stern draughts can be determined.*

2.7.9 *The owner or builder, as appropr iate, shall ensure that the positions of the draught marks are accurately determined and that the marks are located on the hull in a permanent manner. Accuracy of the draught marks shall be demonstrated to the Administration prior to the inclining experiment.*

2.8 Loading and Stability Assessment

On completion of loading of the craft and prior to its departure on a voyage, the master shall determine the trim and stability of the craft and also ascertain and record that the craft is in compliance with stability criteria of the relevant requirements. The Administration may accept the use of an electronic loading and stability computer or equivalent means for this purpose.

2.9 Marking and Recording of the Design Waterline

2.9.1 *The design waterline shall be clearly and permanently marked on the crafts outer sides by the load line mark described below. This and the reference line described in 2.9.2.2 below shall be recorded in the High-Speed Craft Safety Certificate. For craft where this is not practical, e.g. amphibious air-cushion vehicles fitted with peripheral skirts, defined deck reference points shall be provided, from which the freeboard can be measured, and hence the draughts obtained.*

2.9.2 Load line mark

2.9.2.1 *The load line mark shall consist of a ring with an outside diameter of 300 mm and width of 25 mm which is intersected by a horizontal line of length 450 mm and having a breadth of 25 mm, the upper edge of which passes through the centre of the ring. The centre of the ring shall be placed at the longitudinal centre of flotation in the displacement mode and at a height corresponding to the design waterline.*

2.9.2.2 *To assist in verifying the position of the load line mark, a reference line shall be marked on the hull at the longitudinal centre of flotation by a horizontal bar having a length of 300 mm and a breadth of 25 mm and having the upper edge corresponding to the reference line.*

2.9.2.3 *Where practicable, the reference line should be related to the uppermost deck at side. Where it is not possible, the position of the reference line should be defined from the underside of keel at the longitudinal centre of flotation.*

2.9.2.4 *The mark of the Authority by whom the load lines are assigned may be indicated alongside the load line ring above the horizontal line which passes through the centre of the ring, or above and below it. This mark shall consist of not more than four initials to identify the Authority's name, each measuring approximately 115 mm in height, and 75 mm in width.*

2.9.2.5 *The ring, lines and letters shall be painted in white or yellow on a dark ground or in black on a light ground, and permanently marked. The marks shall be plainly visible.*

2.9.3 Verification

The High-Speed Craft Safety Certificate shall not be delivered until the Administration has verified that the marks are correctly and permanently indicated on the sides of the craft.

Part B - Requirements for Passenger Craft

2.10 General

2.10.1 *Where compliance with this Section requires consideration of the effects of passenger weight, the following information shall be used:*

.1 *The distribution of passengers is 4 persons per square metre.*

.2 *Each passenger has a mass of 75 kg.*

.3 *Vertical centre of gravity of seated passengers is 0.3 m above seat.*

.4 *Vertical centre of gravity of standing passengers is 1.0 m above deck.*

.5 *Passengers and luggage shall be considered to be in the space normally at their disposal.*

.6 *Passengers shall be distributed on available deck areas towards one side of the craft on the decks where assembly stations are located and in such a way that they produce the most adverse heeling moment.*

.7 *Passengers assumed to be occupying seats shall be taken as having a vertical centre of gravity corresponding to being seated, with all others standing.*

.8 *On the decks where assembly stations are located, the number of passengers on each deck shall be that which generates the maximum heeling moment. Any remaining passengers shall be assumed to occupy decks adja-*

cent to those on which the assembly stations are located, and positioned such that the combination of number on each deck and total heeling moment generate the maximum static heel angle.

.9 *Passengers shall not be assumed to gain access to the weather deck nor be assumed to crowd abnormally towards either end of the craft unless this is a necessary part of the planned evacuation procedure.*

.10 *Where there are seats in areas occupied by passengers, one passenger per seat shall be assumed, passengers being assigned to the remaining free areas of the deck (including stairways, if appropriate) at the rate of four per square metre.*

2.11 Intact Stability in the Displacement Mode

The craft shall have sufficient intact stability that, when in still water conditions, the inclination of the craft from the horizontal would not exceed 10° (under all permitted cases of loading and uncontrolled passenger movements as may occur).

2.12 Intact Stability in the Non-Displacement Mode

2.12.1 *The total heel angle in still water due to the effect of passenger movements or due to beam wind pressure as per 1.1.4 of annex 6 shall not to exceed 10°. Passenger movement need not be considered where passengers are required to be seated whenever the craft is operating in the non-displacement mode.*

2.12.2 *In all loading conditions, the outward heel due to turning shall not exceed 8° and the total heel due to beam wind pressure as per 1.14 of annex 6 and due to turning shall not exceed 12°.*

2.12.3 *Demonstrating the effect of the passenger heeling moment calculated as given by 2.10 above, or a defined beam wind pressure when at speed, shall be established by conducting a trial or model test with an equivalent heeling moment applied by test weights. Passenger movement may only be neglected on craft where the safety announcement (refer to 8.4.1 and 18.7) expressly requires passengers to remain seated throughout the voyage.*

2.13 Buoyancy and Stability in the Displacement Mode following Damage

2.13.1 *Following any of the postulated damages detailed in 2.6.6 to 2.6.10, in addition to satisfying the requirements of 2.6.11 and 2.6.12, the craft in still water shall have sufficient buoyancy and positive stability to simultaneously ensure that:*

.1 *the angle of inclination of the craft from the horizontal does not normally exceed 10° in any direction. However, where this is clearly impractical, angles of inclination up to 15° immediately after damage but reducing to 10° within 15 min shall be permitted provided that efficient non-slip deck surfaces and suitable holding points, e.g., holes, bars, etc., are provided; and*

.2 *any flooding of passenger compartments or escape routes which might occur will not significantly impede the evacuation of passengers.*

2.13.2 *In addition to the requirements in 2.13.1, Category B craft shall also satisfy the following criteria after sustaining raking damage of 100 % of length L, having the girth and penetration given in 2.6.8.2.2, to any part of the surface of the hull(s) defined in 2.6.8.1:*

.1 *The angle of inclination of the craft from the horizontal shall not exceed 20° in the equilibrium condition;*

.2 *the range of positive righting lever shall be at least 15° in the equilibrium condition;*

.3 *the positive area under the righting lever curve shall be at least 0.015 m-rad in the equilibrium condition;*

.4 *the requirements of 2.6.11.3 and 2.13.1.2 are satisfied; and*

.5 *in intermediate stages of flooding, the maximum righting lever shall be at least 0.05 m and the range of positive righting lever shall be at least 7°*

In complying with the above, the righting lever curve shall be terminated at the angle of downflooding, and only one free surface need be assumed.

2.14 Inclining and Stability Information

2.14.1 *At periodical intervals not exceeding 5 years, a lightweight survey shall be carried out on all passenger craft to verify any changes in lightweight displacement and longitudinal centre of gravity. The passenger craft shall be re-inclined whenever, in comparison with the approved stability information, a deviation from the lightweight displacement exceeding 2 %, or a deviation of the longitudinal centre of gravity exceeding 1 % of L is found or anticipated.*

2.14.2 *A report of each inclining or lightweight survey carried out in accordance with 2.7.1 and of the calculation therefrom of the lightweight condition particulars shall be submitted to the Administration for approval, together with a copy for their retention. The approved report shall be placed on board the craft by the owner in the custody of the master and shall incorporate such additions and amendments as*

the Administration may in any particular case require. The amended lightweight condition particulars so obtained from time to time shall be used by the master in substitution for such previously approved particulars when calculating the craft's stability.

2.14.3 *Following any inclining or lightweight survey, the master shall be supplied with amended stability information if the Administration so requires. The information so supplied shall be submitted to the Administration for approval, together with a copy thereof for their retention, and shall incorporate such additions and amendments as the Administration may in any particular case require.*

Part C - Requirements for Cargo Craft

2.15 Buoyancy and Stability in the Displacement Mode following Damage

Following any of the postulated damages detailed in 2.6.6 to 2.6.10, in addition to satisfying the requirements of 2.6.11 and 2.6.12, the craft in still water shall have sufficient buoyancy and positive stability to simultaneously ensure that the angle of inclination of the craft from the horizontal does not normally exceed 15° in any direction. However, where this is clearly impractical, angles of inclination up to 20° immediately after damage but reducing to 15° within 15 minutes may be permitted provided that efficient non-slip deck surfaces and suitable holding points are provided.

2.16 Inclining

Where it is satisfied by lightweight survey, weighing or other demonstration that the lightweight of a craft is closely similar to that of another craft of the series to which 2.7.1 has been applied, the Administration may waive the requirement of 2.7.1 for craft to be inclined. In this regard, a craft which lies within the parameters of 2.14.1, when compared with a craft of the series which has been inclined, shall be regarded as being closely similar to that craft.