

(ix) Windows shall meet the following requirements:

- (1) framing between navigation bridge windows shall be kept to a minimum and not be installed immediately forward of any workstation;
- (2) to help avoid reflections, the bridge front windows shall be inclined from the vertical plane top out, at an angle of not less than 10° and not more than 25°;
- (3) polarized and tinted windows shall not be fitted; and
- (4) at all times regardless of weather conditions, at least two of the navigation bridge front windows shall provide a clear view, and in addition depending on the bridge configuration, an additional number of windows shall provide a clear view.

(b) Ships constructed before 1 July 1998 shall, where practicable, meet the requirements of (a)(i) and (a)(ii). However, structural alterations or additional equipment need not be required.

(c) With ships of unconventional design which, in the opinion of the Administration cannot comply with this regulation, arrangements shall be provided to achieve a level of visibility that is as near as practical to those prescribed in this regulation.”

#### 第 80/2014 號行政長官公告

中華人民共和國是國際海事組織的成員國及一九七四年十一月一日訂於倫敦的《國際海上人命安全公約》(下稱“公約”)的締約國;

國際海事組織海上安全委員會於一九九六年六月四日透過第MSC.47(66)號決議通過了公約的修正案;

中華人民共和國於一九九九年十二月十三日以照會通知聯合國秘書長,經修訂的公約自一九九九年十二月二十日起適用於澳門特別行政區;

基於此,行政長官根據澳門特別行政區第3/1999號法律第六條第一款的規定,命令公佈包含上指修正案的MSC.47(66)號決議的中文及英文正式文本。

二零一四年十月二十四日發佈。

行政長官 崔世安

#### Aviso do Chefe do Executivo n.º 80/2014

Considerando que a República Popular da China é um Estado Membro da Organização Marítima Internacional e um Estado Contratante da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, concluída em Londres em 1 de Novembro de 1974, adiante designada por Convenção;

Considerando igualmente que, em 4 de Junho de 1996, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.47(66), adoptou emendas à Convenção;

Considerando ainda que a República Popular da China, por nota datada de 13 de Dezembro de 1999, notificou o Secretário-Geral das Nações Unidas sobre a aplicação da Convenção, tal como emendada, na Região Administrativa Especial de Macau, a partir de 20 de Dezembro de 1999;

O Chefe do Executivo manda publicar, nos termos do n.º 1 do artigo 6.º da Lei n.º 3/1999 da Região Administrativa Especial de Macau, a resolução MSC.47(66), que contém as referidas emendas, nos seus textos autênticos em línguas chinesa e inglesa.

Promulgado em 24 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

## 第 MSC.47 (66) 號決議

(1996 年 6 月 4 日通過)

### 通過《1974 年國際海上人命安全公約》修正案

海上安全委員會，

憶及《國際海事組織公約》關於本委員會職責的第 28 (b) 條，

進一步憶及《1974 年國際海上人命安全公約》(以下稱“本公約”)關於本公約附件除第 I 章規定外的修正程序的第 VIII (b) 條，

在其第六十六次會議上審議了按照本公約第 VIII (b) (i) 條提議和分發的本公約修正案，

1. 按照本公約第 VIII (b) (iv) 條，通過了該公約的修正案，其文本載於本決議的附件中；

2. 按照本公約第 VIII (b) (vi) (2) (bb) 條，決定修正案將於 1998 年 1 月 1 日視為已被接受，除非在此日期之前，本公約三分之一以上的締約政府或合計商船隊不少於世界商船隊總噸位 50% 的締約政府通知其反對這些修正案；

3. 請各締約政府注意，按照本公約第 VIII (b) (vii) (2) 條，本修正案按照第 2 段被接受後，應於 1998 年 7 月 1 日生效；

4. 要求秘書長按照本公約第 VIII (b) (v) 條將本決議和載於附件的修正案案文的核正副本發送給本公約的所有締約政府；

5. **進一步要求**秘書長將本決議及其附件的副本發送給非本公約締約政府的本組織會員國。

## 附件

### 《1974年國際海上人命安全公約》修正案

#### 第 II-1 章

#### 構造－分艙與穩性、機電設備

1 以下列文字代替第 II-1 章的標題：

“構造－結構、分艙和穩性、機電設備”

2 在第 A 部分和第 B 部分之間加入下列新的第 A-1 部分：

#### “第 A-1 部分

#### 船舶結構

#### 第 3-1 條

#### 船舶結構、機電要求

除本條其他要求外，船舶的設計、構造和維護應符合經主管機關按照第 XI/1 條的規定認可的一個船級社的結構和機電要求或符合由主管機關規定的具有同等安全水準的適用的國家標準。

## 第 3-2 條

### 海水壓載艙防腐

1 此規定適用於 1998 年 7 月 1 日或之後建造的油輪和散貨船。

2 所有專用海水壓載艙應具有諸如強力保護性塗層或同等有效防腐系統。塗層最好為淡顏色。該系統的選擇應用和維護方案須經主管機關根據本組織通過的指南批准。在合適時，還應使用犧牲陰極。”

### 第 8 條 — 客船破艙穩性

3 在第 2.3.1 款末尾增加下列條文：

“當復原力臂曲線下的面積為第 2.3.2 款規定的面積，並按以下比率增加，該範圍最小可減至 10°：

$$\frac{15}{\text{範圍}}$$

式中，範圍用度表示。”

4 以“正穩性範圍”代替第 2.3.3 款中的“第 2.3.1 款規定的範圍”。

### 第 25-1 條 — 適用範圍

5 在現有第 1 款末尾增加如下一句：

“該部分的要求也應適用於 1998 年 7 月 1 日或之後建造的長度（L<sub>S</sub>）為 80 米及以上但不超過 100 米的貨船。”

**第 25-3 條 – 要求的分艙指數 “R”**

6 以下列條文代替現有第 2 款：

“2 船舶分艙程度由下列所要求的分艙指數 “R” 來確定：

.1 對長度 ( $L_s$ ) 大於 100 米的船舶：

$$R = (0.002 + 0.0009 L_s)^{1/3},$$

式中， $L_s$  單位為米；和

.2 對長度 ( $L_s$ ) 為 80 米及以上但不超過 100 米的船舶：

$$R = 1 - [1 / (1 + \frac{L_s}{100} \cdot \frac{R_o}{1 - R_o})],$$

式中， $R_o$  係按第.1 小段的公式計算出的 R 值。”

**第 45 條 – 觸電、電氣火災及其他電氣災害的預防措施**

7 以 “50 伏” 代替第 1.1.1 款中的 “55 伏”。

8 以下列條文代替現有第 III 章：

## “第 III 章

### 救生設備與裝置

#### 第 A 部分

#### 通則

#### 第 1 條

#### 適用範圍

1 除另有明文規定外，本章適用於 1998 年 7 月 1 日或之後安放龍骨或處於相應建造階段的船舶。

2 就本章而言，術語相應建造階段係指這樣的階段：

- .1 建造的開始與某一特定船舶相同；和
- .2 該船業已開始的裝配量至少為 50 噸，或為全部結構材料估算重量的 1%，以較小者為準。

3 就本章而言：

- .1 建造的船舶係指安放了龍骨或處於相應建造階段的船舶；
- .2 所有船舶係指在 1998 年 7 月 1 日之前、之日或之後建造的船舶；所有客船和所有貨船均應按此解釋；

- .3 改裝為客船的貨船無論其何時建造，均應按在改裝開始之日建造的客船對待。
- 4 對於 1998 年 7 月 1 日之前建造的船舶，主管機關應：
- .1 確保除第 4.2 款的規定外，1998 年 7 月 1 日之前有效的《1974 年國際海上人命安全公約》第 III 章所規定的新船或現有船舶所適用的各項要求得到遵守；
  - .2 當此類船舶上的救生設備或裝置被更換，或者此類船舶進行涉及更換或增加救生設備或裝置的重大修理、改裝或改建時，在合理和可行的情況下，確保這些救生設備與裝置符合本章的要求。但是，如果更換除氣脹式救生筏之外的救生艇筏而不更換其降放設備，或者只更換降放設備而不更換救生艇筏，救生艇筏或降放設備可與被更換的設備為相同類型。

## 第 2 條

### 免除

- 1 主管機關如考慮到航程的遮蔽性和條件，認為實施本章的任何具體要求不合理或不必要時，可對在其航程中距離最近陸地不超過 20 海哩的個別船舶或某類船舶，免除這些要求。
- 2 如果客船用於特種業務載運大量特種業務旅客，如朝聖的旅客，主管機關如認為實施本章要求不切實際時，可對此類船舶免除這些要求，但此類船舶應完全符合下列規則的規定：



- .1 《1971 年特種業務客船協議》所附的規則；和
- .2 《1973 年特種業務客船處所要求議定書》所附的規則。

### 第 3 條

#### 定義

除另有明文規定外，就本章而言：

- 1 防暴露服係指設計供救助艇船員和海上撤離系統人員使用的保護服。
- 2 持證人員係指持有主管機關按照有效的《國際船員培訓、發證和值班標準公約》的要求，授權簽發或承認有效的精通救生艇筏業務證書的人員；或持有非該公約締約國的主管機關為該公約證書的相同目的簽發或承認的證書的人員。
- 3 探測係指對倖存者或救生艇筏位置的測定。
- 4 登乘梯係指設置在救生艇筏登乘地點以供安全登入降落下水後的救生艇筏的梯子。
- 5 自由漂浮下水係指艇筏從下沉中的船舶自動脫開並立即可用的救生艇筏下水方法。
- 6 自由降落下水係指承載全部乘員和屬具的艇筏脫開並在沒有任何制約裝置的情況下任其降落到海面的救生艇筏下水方法。

7 浸水服係指減少穿著該服裝的人員在冷水中體熱損失的保護服。

8 氣脹式設備係指依靠非剛性的充氣室作浮力並且在使用前通常保持未充氣狀態的設備。

9 充氣式設備係指依靠非剛性的充氣室作浮力並且任何時候均保持充氣備用狀態的設備。

10 國際救生設備（救生設備）規則（本章此後稱“規則”）係指本組織海上安全委員會以第 MSC.48（66）號決議通過的《國際救生設備（救生設備）規則》；規則可由本組織進行修正，但此種修正的通過，生效和執行應符合本公約第 VIII 條關於適用於附件除第 I 章以外的修正程序的規定。

11 降落設備或裝置係指將救生艇筏或救助艇從其存放位置安全地轉移到水上的工具。

12 長度係指量自龍骨板上面的最小型深 85% 處水線總長度的 96%，或沿該水線從首柱前邊至舵桿中心線的長度，取大者。船舶設計具有前邊傾斜龍骨時，其計量長度的水線應和設計水線平行。

13 最輕載航行狀態係指船舶在未裝貨的平載情況下載有 10% 物料和剩餘燃料的裝載狀況；如係客船，則指載有滿員旅客、船員及其行李的裝載狀況。

14 海上撤離系統係指將人員快速從船舶登乘甲板轉移至漂浮的救生艇筏的設備。

## 15 型深

- .1 型深係指從龍骨上面量至在船舷處的乾舷甲板樑上面的垂直距離。對水質船舶和混合結構船舶，其垂直距離是從龍骨槽口的下緣量起。如船舶中橫剖面的下部具有凹陷或裝有厚龍骨翼板時，則此垂直距離係從船底平坦部分向內延伸線與龍骨側面相交之點量起。
- .2 具有圓弧形舷邊的船舶，型深應量到甲板型線和船舶外板型線相交之點，這些線延伸成使該舷邊似乎是角形設計的。
- .3 凡乾舷甲板為階梯形並且其升高部分延伸到超過決定型深的點時，型深應量到甲板較低部分與升高部分平行的延伸線。

16 新穎救生設備或裝置係指具有本章規定沒有充分述及的新特徵，但提供同等的或更高的安全標準的救生設備或裝置。

17 正穩性係指一艇筏在失去橫傾力矩後能恢復到其原有位置的能力。

18 回收時間係指將救助艇提升至能使艇上乘員登上船舶甲板的一個位置所需的時間。回收時間包括在艇上進行的諸如傳遞和固定繫艇索，將救助艇與降落設備連接等準備工作所需的時間以及提升救助艇所需的時間。回收時間不包括將降落設備放至救助艇回收位置的時間。

19 救助艇係指為救助遇險人員及集結救生艇筏而設計的艇。

20 拯救係指對倖存者的安全尋回。

21 滾裝客船係指具有第 II-2/3 條定義的滾裝貨物處所或特種處所的客船。

22 短程國際航行係指在該航線中，船舶距離能夠安全安置旅客和船員的港口或地點不超過 200 海里的國際間航行。啟航國最後停靠港至最終目的港之間距離與返航航程均不得超過 600 海里。最終目的港係指船舶在預定的航行中開始返回啟航國時航行開始的最後停靠港。

23 救生艇筏係指從棄船時起能維持遇險人員生命的艇筏。

24 保溫用具係指採用低導熱率的防水材料製成的袋子或衣服。

## 第 4 條

### 救生設備與裝置的鑑定、試驗及認可

1 除按照第 5 和 6 款的規定外，本章要求的救生設備與裝置應經主管機關認可。

2 在認可救生設備與裝置之前，主管機關應確保此種救生設備與裝置：

- .1 按照本組織的建議加以試驗，以證實符合本章和規則的要求；或
- .2 使主管機關滿意地業已成功經受實質上等效於建議中所規定的試驗。

3 在認可新穎救生設備或裝置之前，主管機關應確保此種設備或裝置：

- .1 提供至少等效於本章和規則所規定的安全標準，並按照本組織的建議加以鑑定和試驗；或
- .2 使主管機關滿意地業已成功經受實質上等效於那些建議的鑑定和試驗。

4 主管機關所採用的認可程序還應包括繼續認可或撤銷認可的條件。

5 在接受主管機關原先未予認可的救生設備與裝置之前，主管機關應確信該救生設備與裝置符合本章和規則的要求。

6 本章業已要求而規則中未列入的詳細規範救生設備，應滿足主管機關的要求。

## 第 5 條

### 生產試驗

主管機關應要求救生設備必須經受必要的生產試驗，以確保這些救生設備的製造與經認可的原型設備的標準相同。

## 第 B 部分

### 船舶和救生設備的要求

#### 第 I 節

#### 客船與貨船

#### 第 6 條

##### 通信

1 第 2 款適用於所有客船和等於和大於 300 總噸的貨船。

#### 2 無線電救生設備

##### 2.1 雙向甚高頻無線電話設備

2.1.1 每艘客船和等於和大於 500 總噸的每艘貨船應至少配備三部甚高頻雙向無線電話設備。對於等於和大於 300 總噸但小於 500 總噸的每艘貨船應至少配備兩部甚高頻無線電話設備。此種設備的性能標準應不低於本組織通過的性能標準。如果救生艇筏上安裝了固定式雙向甚高頻無線電話設備，該設備的性能標準應不低於本組織通過的性能標準。

2.1.2 1992 年 2 月 1 日之前安裝在船上且不完全符合本組織通過的性能標準的雙向甚高頻無線電話設備，主管機關可在 1999 年 2 月 1 日前予以接受，主管機關應確信這些設備與經認可的雙向甚高頻無線電話設備兼容。

## 2.2 雷達應答器

每艘客船和每艘等於和大於 500 總噸的貨船的每一舷應至少安裝一部雷達應答器。每艘等於和大於 300 總噸但小於 500 總噸的貨船應至少安裝一部雷達應答器。此種雷達應答器的性能標準應不低於本組織通過的性能標準。雷達應答器應存放於能被快速放置到任何救生艇筏的位置上，但不包括第 31.1.4 條所要求的救生筏。或者，在除第 31.1.4 條所要求者以外的每艘救生艇筏上均應存放一部雷達應答器。對於載有至少兩部雷達應答器並配有自由降落救生艇的船舶，一部雷達應答器應存放在自由降落救生艇上，另一部則應存放在緊鄰駕駛室處，以便能在船上使用並可隨時傳至任何其他救生艇筏。

## 3 遇險火焰信號

應攜帶並在駕駛室或其附近存放不少於 12 支符合規則第 3.1 節要求的火箭降落傘火焰信號。

## 4 船上通信和警報系統

4.1 應配備一套固定式或手提式設備或兩種型式設備的應急設備供船上應變管制站、集合和登乘地點與要害位置之間的雙向通信聯繫使用。

4.2 應配備符合規則第 7.2.1 段所要求的通用應急警報系統，並用於召集旅客和船員至集合站和採取應急部署表中所列的行動。該系統應由符合規則第 7.2.2 段要求的公共廣播系統或其他合適的通信手段予以補充。當通用應急警報系統啟動時，娛樂性音響系統應能自動關閉。

4.3 客船上的通用應急警報系統應能在所有開敞甲板上聽到。

4.4 在裝有海上撤離系統的船上，應確保登乘站和平台或救生艇筏之間的通信。

## 5 客船的公共廣播系統

5.1 除符合第 II-2/40.5 條或第 II-2/41.2 條（視情而定）和第 6.4.2 款的要求外，所有客船均應裝有公共廣播系統。對於在 1997 年 7 月 1 日之前建造的客船，第 5.2 和 5.4 款的要求，以第 5.5 款為準，應在不晚於 1997 年 7 月 1 日之後的第一個定期檢驗日期適用。

5.2 公共廣播系統應能在規則第 7.2.2.1 段規定的所有處所的環境噪音下被清晰地聽到，並應備有能從駕駛室的一個位置或主管機關認為必要的此類其他位置對該系統進行控制的超控功能，以便在有關處所的揚聲器被關閉、其音量被調小或公共廣播系統被用於其他目的時，仍能廣播所有的應急信息。

5.3 在 1997 年 7 月 1 日或之後建造的客船上：

- .1 公共廣播系統應至少具有兩個在其整個長度內完全分開的環路並具有兩個分開和獨立的放大器；且
- .2 公共廣播系統及其性能標準應由主管機關在注意到本組織通過的建議書的情況下予以認可。

5.4 公共廣播系統應與第 II-1/42.2.2 條所要求的應急電源相連接。

5.5 1997 年 7 月 1 日之前建造並已安裝了經主管機關批准、基本符合規則第 5.2 和 5.4 節以及第 7.2.2.1 段要求的公眾廣播系統的船舶無須改變其系統。



## 第 7 條

### 個人救生設備

#### 1 救生圈

1.1 符合規則第 2.1.1 段要求的救生圈：

- .1 應分放在船舶兩舷容易取到之處，並在切實可行時，分放在所有延伸到船舷的露天甲板上；至少有 1 個應放在船尾附近；
- .2 其存放應能迅速取下，而不得以任何方式永久固定。

1.2 船舶每舷至少有 1 個救生圈應裝有符合規則第 2.1.4 段要求的可浮救生索，其長度應不少於其存放處在最輕載航行水線以上高度的 2 倍或 30 米，取其大者。

1.3 不少於總數一半的救生圈應備有符合規則第 2.1.2 段要求的救生圈自亮燈。這些救生圈中不少於 2 個還應備有符合規則第 2.1.3 段要求的救生圈自發煙霧信號，並應能自駕駛室迅速拋投。備有自亮燈和備有自亮燈與自發煙霧信號的救生圈應相等地分佈在船舶兩舷；這些救生圈不應是符合第 1.2 款要求的帶有救生索的救生圈。

1.4 每個救生圈應以印刷體大寫羅馬字母標明其所屬船舶的船名和船籍港。

#### 2 救生衣

2.1 應為船上每人配備一件符合規則第 2.2.1 或 2.2.2 段要求的救生衣，另外還應：

- .1 配備佔船上旅客人數至少 10%的適合兒童穿著的救生衣，或為每個兒童配備 1 件救生衣時所可能需要的更大數量；和
- .2 配備供值班人員和位於遠處的救生艇筏地點使用的足夠數量的救生衣。為值班人員配備的救生衣應存放在駕駛室、機艙控制室以及任何其他有人值班的地點。

2.2 救生衣應放在容易到達之處，其位置應加明顯標誌。凡由於船舶的特殊佈置，使按第 2.1 款要求配備的救生衣無法取到時，可制定主管機關滿意的變通規定，它可包括增加配備救生衣的數量。

2.3 在除自由降落救生艇外的全封閉救生艇內使用的救生衣不應妨礙進入救生艇或座位，包括救生艇內座位安全帶的操作。

2.4 經選擇用於自由降落救生艇的救生衣及其存放或穿著方式不應妨礙進入救生艇，也不應妨礙乘員安全或救生艇的操作。

### **3 浸水服和防暴露服**

每個被指派為救生艇員的人員或被指派為海上撤離系統組的人員應配備一件合身的符合規則第 2.3 節要求的浸水服或符合規則第 2.4 節要求的防暴露服。如果船舶通常在主管機關認為無必要提供溫度防護的溫暖氣候中航行，可不配備此種防暴露服。

## 第 8 條

### 應變部署表與應變須知

- 1 本條適用於所有船舶。
- 2 船上每個人員應配備一份在緊急應變時必須遵循的明確的須知。如果是客船，這些須知應用船旗國要求的一種或多種文字和英語寫成。
- 3 符合第 37 條的應變部署表和應變須知應展示在全船各明顯之處，包括駕駛室、機艙和船員起居處所。
- 4 以圖解和幾種適當文字說明的須知應在旅客艙室張貼，並在集合地點及其他旅客處所明顯地展示出來以告知旅客：
  - .1 他們的集合地點；
  - .2 他們在應變時必須採取的必要行動；和
  - .3 救生衣的穿著方法。

## 第 9 條

### 操作須知

- 1 本條適用於所有船舶。
- 2 應在救生艇筏及其降落操縱器的上面或附近設置告示或標誌，

它們應：

- .1 圖解說明此操縱器的用途及此項設備的操作程序，並給出有關須知或注意事項；
- .2 在應急照明情況下，容易看清；和
- .3 使用符合本組織建議要求的符號。

## 第 10 條

### 救生艇筏的配員與監督

- 1 本條適用於所有船舶。
- 2 船上應有足夠數量受過訓練的人員召集和協助未受過訓練的人員。
- 3 船上應有足夠數量的船員（他們可以是駕駛員或持證人員）操作船上全體人員棄船所需要的救生艇筏及其降落裝置。
- 4 每艘將被使用的救生艇筏應由一名駕駛或持證人員負責。但是，主管機關在適當考慮到航程性質、船上人員和船舶特性後可以允許安排有操作救生筏經驗的人員代替具有上述資格的人員。如係救生艇，還應指派 1 名副指揮。
- 5 救生艇筏的負責人應有一份救生艇筏船員名單，並應確保其指揮下的船員熟悉其各項任務。救生艇的副指揮也應有一份該艇配員名單。

6 每艘機動救生艇筏應有 1 名指派的操作發動機和進行小的調整的人員。

7 船長應確保第 2、3、4 款所指人員被妥善地分配到船舶的救生艇筏上。

## 第 11 條

### 救生艇筏集合與登乘佈置

1 要求配備經認可的降落裝置的救生艇和救生筏應存放於儘可能靠近起居處所和服務處所的地方。

2 集合地點應緊靠登乘地點。每一集合地點應有足夠而暢通的甲板空間，以容納指定在該地點集合的所有人員，但每人至少應有 0.35 平方米面積。

3 集合地點和登乘地點應能方便地從居住和工作區域進入。

4 集合與登乘地點應視情由第 II-1/42 或 II-1/43 條所要求的應急電源供電的照明系統給予足夠的照明。

5 通往集合與登乘地點的通道、梯道和出口應予照明。此種照明應能視情由第 II-1/42 或 II-1/43 條所規定的應急電源供電。按照本組織建議書，除第 II-2/28.1.10 條所規定的標誌外並作為該標誌的一部分，通向集合地點的通道均應標有用於該目的的集合地點符號。

6 吊艇架降落和自由降落的救生艇筏的集合和登乘地點的佈置應能使擔架病人放入救生艇筏。

7 用於舷側降放的救生艇筏的每一登乘地點或相鄰每兩登乘地點，應設置一台符合規則第 6.1.6 段要求、在最輕載航行狀態下處於縱傾大至 10 度和橫傾大至每舷 20 度的不利狀況時，單一長度可從該甲板延伸到水線的登乘梯。但是，如果船舶每舷至少備有一台登乘梯，主管機關可准許以供登入在水面上的救生艇筏的經認可裝置代替此類梯子。對於第 31.1.4 條所規定的救生艇筏，可准許使用以控制的方式提供下水坡道的其他登乘設施。

8 必要時，應設置使由吊艇架降落的救生艇筏貼靠並繫留在船舷的裝置，以便人員能安全登乘。

## 第 12 條

### 降落站

降落站應處於能確保安全降落的位置，特別注意距離推進器及船體陡直懸空部分的間隙，以便除專門設計的自由降落式救生艇筏外，其他救生艇筏能儘可能使救生艇筏從船舶平直舷側降落。如置於船的前部，則應位於在防撞艙壁後面有遮蔽的地方；在這一方面，主管機關應對吊艇設備的強度給予特別考慮。

## 第 13 條

### 救生艇筏的存放

#### 1 每艘救生艇筏的存放應：

- .1 使該救生艇筏或存放裝置不干擾任何其他降落站的任何其他救生艇筏或救助艇的操作；
- .2 在安全和可行的情況下儘可能靠近水面，並且如係不用拋出船外降落的救生艇筏，使處在登乘位置上的救生艇筏，當船舶滿載、縱傾大至每舷 10 度和橫傾大至每舷 20 度的不利狀況或者當船舶處於其露天甲板的邊緣浸入水中的角度時（以角度較小者為準），高於水線不少於 2 米；
- .3 處在隨時可用的狀態，以使兩名船員能在不到五分鐘的時間內完成登乘和降落準備工作；
- .4 配齊本章和規則所要求的裝備；和
- .5 在切實可行的情況下，存放在安全和有遮蔽的地方，並得到保護免受火災和爆炸的損害。特別是除第 31.1.4 條規定的救生艇筏以外的槽罐輪上的救生艇筏不應存放在貨艙、污油艙或其他裝有爆炸或有害貨物的艙櫃上或其頂上。

2 順船舷降落的救生艇應存放在推進器之前儘量遠的地方。在船長等於和大於 80 米但小於 120 米的貨船上，每一救生艇應存放在使救生艇尾端至少在推進器之前不少於救生艇長度的地方。在船長等於和大於 120 米的貨船與等於和大於 80 米的客船上，每一救生艇應存

放在使救生艇尾端至少在推進器之前不少於救生艇長度一倍半的地方。如適當，船舶的佈置應使在其存放位置上的救生艇得到保護免受巨浪的損害。

3 救生艇的存放應連附於降落設備。

4.1 每一艘救生筏的存放應使其吊索永久地連附於船舶。

4.2 每一救生筏或成組救生筏均應與符合規則第 4.1.6 段要求的自由降落裝置存放在一起，這樣，在船舶下沉時，每個筏均能自由降落，如果是氣脹式的，則可自動充氣。

4.3 救生筏的存放應使人工能一次從其繫固裝置上釋放一個救生筏或一個容器。

4.4 第 4.1 和 4.2 段不適用於第 31.1.4 條要求的救生筏。

5 吊筏架降落的救生筏應存放在吊筏鈎可達到的範圍內，除非備有在本條第 1.2 款所規定的縱傾和橫傾範圍內或因船舶擺動或失去動力而不致無法操作的某些轉移設施。

6 用於拋出舷外降落的救生筏的存放應能容易地轉移到船舶的任何一舷以便降落，除非船舶每舷已存放第 31.1 條要求的能在任何一舷降落的總容量的救生筏。



## 第 14 條

### 救助艇的存放

救助艇的存放應：

- .1 處於 5 分鐘內降落下水的持續備用狀態；
- .2 處於適宜降落並回收的位置；
- .3 使救助艇及其存放裝置均不干擾其他降落地點的其他救生艇筏的操作；
- .4 如其兼作救生艇，符合第 13 條的要求。

## 第 15 條

### 海上撤離系統的存放

1 船側在海上撤離系統的登乘地點與船舶處於最輕載航行狀態的水線之間應無任何開口，並應備有從任何突出部位保護該系統的裝置。

2 海上撤離系統應處於能確保安全降落的位置，特別注意距離推進器及船體陡直懸空部分的空隙，以便儘實際可行地將該系統從船舶平直舷側降落。

3 每一海上撇離系統的存放應使無論過道，平台或其存放，或操作設施，不致於干擾任何其他降落地點的其他救生設備的操作。

4 如適當，船舶的佈置應使處於存放位置的海上撇離系統免受惡劣海況的損害。

## 第 16 條

### 救生艇筏降落與回收裝置

1 除非另有規定，所有救生艇筏應配有符合規則第 6.1 節要求的降落和登乘設備，但下列者除外：

- .1 從最輕載航行狀態的水線以上少於 4.5 米的甲板上登乘，並且其質量不大於 185 公斤；或
- .2 從最輕載航行水線以上少於 4.5 米的甲板上登乘，並且其存放係為在處於縱傾大至 10 度和橫傾大至每舷 20 度的不利狀況時仍能從其存放的位置直接降落者；或
- .3 載有超過按船上總人數的 200%所配備的救生艇筏，並且其質量不大於 185 公斤；
- .4 載有超過按船上總人數的 200%所配備的救生艇筏，存放係為在處於縱傾大至 10 度和橫傾大至每舷 20 度的不利狀況時仍能從其存放的位置直接降落者；或

- 5 提供與海上撤離系統一起使用，符合規則第 6.2 節的要求並且其存放係為當處於縱傾大至 10 度和橫傾大至每舷 20 度的不利狀況時仍能從其存放的位置直接降落者。
- 2 每艘救生艇應配有一台能降落和回收該救生艇的設備。此外，還應有將救生艇吊離以便對降落裝置進行維修的裝置。
- 3 降落與回收裝置應使設備的操作人員在救生艇筏降落期間以及在救生艇筏回收期間，能在船上隨時觀察到救生艇筏。
- 4 船上所配備的類似救生艇筏僅應使用一種型號的脫開機械裝置。
- 5 在任一降落站進行的救生艇筏的準備和操作應不干擾在任何其他站的其他救生艇筏或救助艇的迅速準備和操作。
- 6 吊艇索（凡使用時）的長度應從船舶在最輕載航行狀態下，處於縱傾大至 10 度和橫傾大至每舷 20 度的不利狀況時，足使救生艇筏到達水面。
- 7 在準備和降落過程中，救生艇筏、其降落設備以及艇筏將降落的水面，應視情由第 II-1/42 或 II-1/43 條所要求的應急電源供電的照明系統給以足夠的照明。
- 8 應備有在棄船過程中防止任何的水排放到救生艇筏上的裝置。
- 9 如救生艇筏有被船舶減搖翼造成損壞的危險，則應備有由應急電源驅動的能將減搖翼收回船內的裝置；駕駛室應備有由應急電源操縱的指示減搖翼位置的指示器。

10 如載有符合規則第 4.5 節要求的部分封閉的救生艇，應裝設吊艇架橫張索，在其上面並安裝不少於 2 根當船舶在最輕載航行狀況下，縱傾大至 10 度和橫傾大至每舷 20 度的不利條件時，到達水面的足夠長度的救生索。

## 第 17 條

### 救助艇的登乘、降落與回收裝置

1 救助艇的登乘與降落裝置應為能在儘可能短的時間內使救生艇的船員登上並降落。

2 如救助艇係船舶的救生艇之一，其登乘裝置與降落站應符合第 11 條和第 12 條的要求。

3 降落裝置應符合第 16 條的要求。但所有救助艇應能在船舶於平靜水面前進航速達 5 節時降落下水，必要時可使用艇首纜。

4 救助艇的回收時間，在正常海況下，當載足全部乘員和屬具時，應不超過 5 分鐘。如果救助艇還兼作救生艇，當載有其救生艇設備和經認可的至少 6 名救助艇額定乘員時，這一回收時間亦應是合適的。

5 救助艇的登乘和回收裝置應顧及擔架病人的安全和有效抬運。如果重的吊索滑車構成危險，為安全起見，應提供惡劣氣候下使用的回收環索。

## 第 18 條

### 拋繩設備

應配備符合規則第 7.1 節要求的拋繩設備。

## 第 19 條

### 應急訓練和演習

1 本條適用於所有船舶。

#### 2 熟悉安全裝置和進行集合演練

2.1 每一個被分配有應急職責的船員在開航前應熟悉這些應急職責。

2.2 當船舶從事旅客預定在船上逗留超過 24 小時的航行時，應在旅客登船後 24 小時內進行旅客集合。應指導旅客使用救生衣和在緊急情況下需採取的行動。

2.3 凡有新旅客上船時，應在即將開航前或在開航後不久向旅客進行安全簡介。安全簡介應包括第 8.2 條和第 8.4 條要求的須知，並應用旅客可能聽懂的一種或多種語言予以通告。通告應使用船上的公共廣播系統或以在航行中尚未聽到的旅客至少可能聽到的其他等效設施進行。如果集合演練在開航後立即進行，此種安全簡介可包括在第 2.2 款要求的集合中。可使用信息板，公告欄或船上錄相顯示器的錄相節目對該簡介進行補充，但不能用來取代此通告。

### 3 演習

3.1 演習應儘可能按實際緊急情況進行。

3.2 每個船員每月應至少參加一次棄船演習和一次消防演習。如有 25%以上的船員未參加該船前一個月的棄船和消防演習，船員應在該船離港後 24 小時內舉行這兩項演習。如果船舶在經過重大改建後首次營運或有新船員參加，這些演習應在開航前進行。如果此要求不可行，主管機關可以接受對此種級別的船舶至少等效的其他安排。

#### 3.3 棄船演習

3.3.1 每次棄船演習應包括：

- .1 使用第 6.4.2 條所規定的報警器，召集旅客和船員至集合地點，隨後通過公共廣播系統或其他通信系統宣佈演習，並確保他們了解棄船命令；
- .2 向各站報告並準備應急部署表中規定的職責；
- .3 查看旅客和船員衣著是否合適；
- .4 查看救生衣穿著是否正確；
- .5 在完成任何必要的降落準備工作後，至少降下一隻救生艇；
- .6 起動並操作救生艇發動機；
- .7 操作降落救生筏所用的吊筏架；
- .8 模擬搜救被陷於其艙室的旅客；並
- .9 告知如何使用無線電救生設備。

3.3.2 不同的救生艇在連續的演習中應儘實際可能地根據第 3.3.1.5 款的要求予以降落。

3.3.3 除第 3.3.4 和 3.3.5 款的規定外，在棄船演習中，每艘救生艇應至少每 3 個月一次地連同其被指定的艇上操作船員降落下水並在水上進行操縱。

3.3.4 當自由降落救生艇不可行時，如該艇至少每 6 個月一次地連同其被指定的艇上操作船員自由降落並在水上進行操縱，下降而不是降落用於自由降落的救生艇入水是可以接受的。但是，萬一不可行時，如果作了在不超過 6 個月的間隔內進行模擬降落的安排，主管機關可將該期限延長至 12 個月。

3.3.5 對於從事短程國際航行的船舶，如果由於港口泊位的安排和營運格局不允許這些救生艇在其一舷降落下水，主管機關可准許救生艇不在該舷降落下水。但所有這些救生艇應至少每 3 個月下降一次並且至少每年降落下水一次。

3.3.6 除兼作救助艇的救生艇外，在合理和可行範圍內，救助艇應每六個月一次地連同其被指定的艇上船員降落下水並在水上進行操縱。無論如何，此要求應至少每 3 個月執行一次。

3.3.7 如救生艇與救助艇的降落下水演習是在船舶前進中進行，由於涉及危險性，該項演習僅應在有遮蔽的水域並在有此項演習經驗的駕駛員監督下進行。

3.3.8 如果船舶裝有海上撤離系統，演習應包括執行最接近於這一系統實際佈置所要求的此系統的佈置程序。此方面的演習應以第 35.4 條要求的使用船上培訓設備進行定期授課加以補充。此外，每一系統

方面的成員應儘實際可能地通過參加在船上或岸上的向水中佈置的類似系統的活動，使之得到進一步培訓，其間隔期為不長於兩年，在任何情況下不長於3年。此種培訓可與第20.8.2條要求的佈置相結合。

3.3.9 在每次棄船演習時，應測試集合與棄船所用的應急照明系統。

### 3.4 消防演習

3.4.1 消防演習應計劃為充分考慮到因船舶類型和所載貨物的不同而可能發生的各種緊急情況下的例行演習。

3.4.2 每次消防演習應包括：

- .1 向各站報告並準備第8條要求的應急部署表中規定的職責；
- .2 起動消防泵，使用至少兩個所要求的噴水龍頭，以表明該系統工作正常；
- .3 檢查消防員的裝備和其他個人救助設備；
- .4 檢查有關通信設備；
- .5 檢查演習場地的水密門、防火門、阻火器和通風系統的主要進出口的可操作性；和
- .6 檢查為隨後的棄船而做的必要安排。

3.4.3 演習時所使用的設備應立即放回原處並保持在充分可用的狀態，在演習中發現的任何故障和缺陷均應儘快予以消除。



## 4 船上訓練與授課

4.1 在一新船員上船後，應儘快，但不遲於上船後兩個星期，進行使用船舶救生設備包括救生艇筏屬具和使用船舶滅火設備的船上訓練。如果船員係定期安排輪流上船，此項訓練應在不遲於第一次上船後兩星期內進行。船舶滅火設備、救生設備使用和海上救生方面的授課間隔期與演習間隔相同。單次授課可包括船舶救生和滅火設備的不同部分，但是船舶的所有救生和滅火設備內容應在 2 個月中的任何期間內完成。

4.2 每個船員均應被授予包括但不僅限於如下課程：

- .1 船舶氣脹式救生筏的操作與使用；
- .2 低溫保護問題，低溫急救護理和其他適當的急救程序；
- .3 在惡劣氣候和惡劣海況中使用船舶救生設備所需要的其他專門課程；和
- .4 滅火設備的使用和操作。

4.3 在每艘裝設吊架降落救生筏的船舶上，應在不超過 4 個月的間隔期舉行此項設備使用的船上訓練。凡可行時，此項訓練應包括救生筏的充氣與降下。該救生筏可以用於訓練的專用救生筏，而不是船舶救生設備的組成部分；此救生筏應有明顯標記。

## 5 記錄

進行集合的日期、棄船演習與消防演習、其他救生設備演習以及船上訓練的細節應載於主管機關可能規定的航海日誌內。若在指定時間未進行全部集合、演習或訓練項目時，則應在航海日誌內記述其原因和已進行的集合、演習或訓練項目的範圍。

## 第 20 條

### 操作準備、維護保養與檢查

1 本條適用於所有船舶。1986 年 7 月 1 日前建造的船舶應儘實際可行地符合第 3 和 6.2 款的要求。

#### 2 操作準備

在船舶離港前和在整個航行時間內，所有救生設備均應處於正常工作狀態，並立即可用。

#### 3 維護保養

3.1 應備有符合第 36 條要求的救生設備船上維護保養須知，並應按須知進行維護保養。

3.2 主管機關可以接受以包括第 36 條要求的船上計劃維護保養方案代替第 3.1 款所要求的須知。

#### 4 吊艇索的保養

4.1 應將降落所用的吊艇索的兩端相互調頭，間隔期不超過 30 個月，並在由於吊艇索老化時，或在不超過 5 年的間隔期中，視必要予以更新，取其較早者。

4.2 主管機關可以接受以定期檢查吊艇索並在必要時對老化的吊艇索進行更換或在不超過 4 年的間隔中進行更新（取其較早者）的辦法代替第 4.1 款中要求的“兩端相互調頭”。

## 5 備件和修理設備

救生設備及其易損或易耗而必須定期更換的部件應配有備件和修理設備。

## 6 每周檢查

每周應進行下列試驗和檢查：

- .1 所有救生艇筏、救助艇及降落設備應進行外觀檢查，以確保立即可用；
- .2 如果環境溫度在啟動發動機所規定的最低溫度以上，所有救生艇筏和救助艇的發動機應進行運轉，總時間不少於 3 分鐘。在這段時間內，應證明齒輪箱和齒輪傳動鏈的嚙合令人滿意。如果救助艇的舷外發動機的特性不允許其在推進器不浸於水中的情況下運轉 3 分鐘，即應按照廠方手冊規定的時限運轉。在特殊情況下，主管機關可對 1986 年 7 月 1 日之前建造的船舶免除此項要求；以及
- .3 應試驗通用緊急報警系統

## 7 月度檢查

每月應按第 36.1 條所規定的檢查表檢查救生設備（包括救生屬具），確保完整無缺並處於良好狀態。檢查報告應載入航海日誌。

## 8 氣脹式救生筏、氣脹式救生衣，海上撇離系統和充氣式救助艇的檢修

8.1 應對每隻氣脹式救生筏、氣脹式救生衣和海上撇離系統進行維修：

- .1 間隔期限不超過 12 個月，但在任何情況下這樣做不可行時，主管機關可展期至 17 月；和
- .2 在經認可的檢修站進行，該檢修站應是勝任對它們進行檢修、備有正規檢修器具並僱用受過適當培訓人員者。

## 8.2 海上撤離系統的輪流佈置

除第 8.1 款要求的海上撤離系統檢修間隔期以外或連同此間隔期一起，船上的每一海上撤離系統應按輪流的辦法在主管機關同意的間隔期內予以佈置，但每一系統至少每 6 年佈置一次。

8.3 認可符合第 4 條規定的新的和新型氣脹式救生筏佈置的主管機關，可按下列條件允許延長檢修間隔：

8.3.1 新的和新型救生筏的佈置已證明在延長的檢修間隔期內，能保持試驗程序所要求的同等標準。

8.3.2 救生筏系統應由持證人員按第 8.1.1 款的要求進行檢查。

8.3.3 不超過 5 年間隔期的檢修應按本組織的建議進行。

8.4 充氣式救助艇的所有修理和維護保養應按照廠方說明書進行。應急修理可在船上進行，但永久性修理必須在經認可的檢修站完成。

8.5 按照第 8.3 款允許延長救生筏檢修間隔期的主管機關，應根據第 I/5 (b) 條的規定將此行動通知本組織。

## 9 靜水壓力釋放器的定期檢修

除可任意處置的靜水壓力釋放器以外，靜水壓力釋放器應予檢修：

- .1 間隔期限不得超過 12 個月，但在任何情況下這樣做不可行時，主管機關可展期至 17 個月；和
- .2 在檢修站進行，該檢修站應是勝任對它們進行檢修、備有正規檢修器具並僅僱用受過適當培訓人員者。

## 10 存放位置的標誌

救生設備的容器、托架、支架和其他類似的存放位置應按照本組織建議的符號作出標誌，指明各處所存放的設備是用於符號所表明的目的。如果一個位置存放了一種以上的設備，還應標明設備數量。

## 11 定期檢修降落設備和帶載釋放裝置

### 11.1 降落設備：

- .1 應按第 36 條規定的關於船上維修保養須知建議的間隔期進行檢修；
- .2 應在不超過 5 年的間隔期內進行一次徹底檢查；和
- .3 在完成.2 中的檢查後，按規則第 6.1.2.5.2 段的要求對絞車制動器進行動態試驗。

### 11.2 載有救生艇的釋放裝置應：

- .1 按第 36 條規定的關於船上維修保養須知建議的間隔期進行檢修；
- .2 在第 I/7 條和 I/8 條要求的檢驗期間由經過培訓、熟悉該系統的人員進行徹底檢查；和

- .3 在釋放裝置進行大修時，以救生艇在滿載乘員和屬具的情況下的總重量的 1.1 倍負荷進行操作性試驗。此種大修和試驗應至少每 5 年進行一次。

## 第 II 節

### 客船

#### (附加要求)

## 第 21 條

### 救生艇筏和救助艇

#### 1 救生艇筏

##### 1.1 從事非短程國際航行的國際航行客船應配備：

- .1 符合規則第 4.5 或 4.6 節要求的半封閉或全封閉救生艇，其在每舷的總容量須為能容納為不少於船上人員總數的 50%。主管機關可准許以相等總容量的救生筏來代替救生艇，但是，船舶每舷應配備足夠容納不少於船上人員總數 37.5% 的救生艇。氣脹式或鋼性救生筏應符合規則第 4.2 或 4.3 節的要求並應使用相等地分佈在船舶每舷的降落設備；和

- .2 此外，符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏其總容量至少須為能容納船上人員總數的 25%。船舶每舷至少應有 1 台降落設備用於降落這些救生筏，該設備可以是按第 1.1.1 款要求裝設者或是能在兩舷均可使用的經認可的等效設備。但這些救生筏的存放無需符合第 13.5 條的要求。

1.2 從事短程國際航行並符合第 II-1/6.5 條規定的分艙特種標準的客船應配備：

- .1 符合規則第 4.5 或 4.6 節要求的半封閉或全封閉救生艇，其總容量至少須為能容納船上人員總數的 30%。救生艇應儘可能實際地相等分佈在船舶每舷。此外，符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏，連同救生艇的容量，救生艇筏的總容量應能容納船上人員總數。這些救生筏應使用相等地分佈在船舶每舷的降落設備；和
- .2 此外，符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏，其總容量至少須為能容納船上人員總數的 25%。船舶每舷至少應有 1 台降落設備用於降落這些救生筏，該設備可以是按第 1.2.1 款要求裝設者或是能在兩舷均可使用的經認可的等效設備。但這些救生筏的存放無需符合第 13.5 條的要求。

1.3 從事國際短程航行但不符合第 II-1/6.5 條規定的分艙特種標準的客船，應配備符合第 1.1 款要求的救生艇筏。

1.4 為船上人員總數棄船所需要提供的**所有**救生艇筏，應能在發出棄船信號後 30 分鐘內載足全部乘員及屬具降落水中。

1.5 為代替滿足第 1.1，1.2 或 1.3 款的要求，小於 500 總噸的客船，凡船上人員總數少於 200 人者，可符合下列要求：

- .1 船舶每舷所配備的符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏的總容量應能容納船上人員總數；
- .2 除非第 1.5.1 款所要求的救生筏存放於能在單一開敞甲板上迅速地轉移到任何一舷的位置，否則，應配備附加救生筏，使每舷的總容量為能容納船上人員總數的 150%；
- .3 如果第 2.2 款所要求的救助艇亦是符合規則第 4.5 或 4.6 節所要求的半封閉或全封閉救生艇，則其可計入第 1.5.1 款所要求的總容量，但船舶任何一舷的總容量至少是船上人員總數的 150%；和
- .4 如有任何救生艇筏丟失或不能使用，每舷仍應有足夠數量的救生艇筏可供使用，包括存放於能在單一開敞甲板上迅速轉移到任何一舷的位置上的救生艇筏，以容納船上的所有人員。

1.6 符合規則第 6.2 節要求的一個或多個海上撤離系統可由第 1.1.1 或 1.1.2 款所要求的救生筏和降落裝置的等效容量代替。

## 2 救助艇

2.1 等於和大於 500 噸的客船應在船舶每舷至少配備 1 艘符合規則第 5.1 節所要求的救助艇。



2.2 小於 500 噸的客船應至少配備一艘符合規則第 5.1 節所要求的救助艇。

2.3 如果某一救生艇也符合救助艇的要求，則可同意將其作為救助艇。

### 3 救生筏的調配

3.1 客船配備的救生艇和救助艇的數量，應足以確保在提供給船上全體人員棄船時，每艘救生艇或救助艇所需調配的救生筏不多於 6 隻。

3.2 從事短程國際航行而且符合第 II-1/6.5 條規定的分艙特種標準的客船配備的救生艇和救助艇的數量，應足以確保在提供給船上全體人員棄船時，每艘救生艇或救助艇所需調配的救生筏不多於 9 隻。

## 第 22 條

### 個人救生設備

#### 1 救生圈

1.1 客船應配備符合第 7.1 條和規則第 2.1 節要求的救生圈，其數量應不少於下表的規定：

船長（米）	最少救生圈數
60 以下	8
60 至 120 以下	12
120 至 180 以下	18
180 至 240 以下	24
240 及以上	30

1.2 儘管有第 7.1.3 條的規定，長度為 60 米以下的客船應配備不少於 6 個設有自亮燈的救生圈。

## 2 救生衣

2.1 除第 7.2 條規定的救生衣外，每艘客船應配備供不少於船上人員總數 5% 的救生衣。這些救生衣應存放在甲板或集合地點的顯明易見的地方。

2.2 當旅客的救生衣存放在遠離連接公共場所和集合地點的直接通道的客室時，第 7.2.2 條所要求的用於這些旅客的額外救生衣應存放在公共場所，集合地點，或公共場所和集合地點之間的直接通道上。救生衣的存放應使其在分發和穿著時不影響旅客向集合地點和救生艇筏登乘站的有序運動。

## 3 救生衣燈

3.1 所有客船上的每一件救生衣均應裝有一盞符合規則第 2.2.3 段要求的燈。

3.2 主管機關可接受 1998 年 7 月 1 日前配備在客船的救生衣上但不完全符合規則第 2.2.3 段要求的燈，直至救生衣燈被正常更換或直至 2002 年 7 月 1 日以後第一次定期檢驗為止，取其早者。

#### 4 浸水服與保溫用具

4.1 所有客船至少應為每艘救生艇配備 3 套符合規則第 2.3 節要求的浸水服；此外，還應為乘坐該救生艇但未配備浸水服的每個人提供符合規則第 2.5 節要求的保溫用具。在下列情況下，不必配備這些浸水服和保溫用具：

- .1 全封閉或半封閉救生艇中的人員；或
- .2 如船舶一直從事溫暖氣候航區航行，主管機關認為無須配備。

4.2 第 4.1.1 款的規定還適用於 1986 年 7 月 1 日前建造的船舶所配備的不符合規則第 4.5 節或 4.6 節要求的半封閉或全封閉救生艇。

### 第 23 條

#### 救生艇筏與救助艇的登乘佈置

1 在客船上，救生艇筏登乘佈置的設計應適合於：

- .1 所有從存放處直接登乘並降落，或者從登乘甲板登乘並降落（但非從兩處登乘並降落）的救生艇；
- .2 從存放處鄰近的位置登乘並降落或在降落前移至按第 13.5 條要求的位置登乘並降落的吊筏架降落的救生筏。

2 救助艇的佈置應使救助艇可在存放處直接登乘，並在救助艇定員載足的情況下直接降落。儘管有第 1.1 款的要求，如果救助艇也是

救生艇，並且其他救生艇係從登乘甲板登乘及降落者，其安排應使救助艇也能從登乘甲板登乘並降落。

## 第 24 條

### 救生艇筏的存放

客船上救生艇筏的存放高度應考慮第 13.1.2 條的要求、第 II-2/28 條的逃生條款，船舶尺寸以及船舶計劃營運區域可能遇到的氣候條件。對於用吊艇架降落的救生艇筏，在登乘地點放有救生艇筏的吊架，從吊架頭至船舶處於最輕航行狀況的水線的高度應儘可能不超過 15 米。

## 第 25 條

### 集合地點

每艘客船除符合第 11 條的要求外，還應設有旅客集合地點，該地點應：

- .1 設在登乘地點附近，並可使旅客易於到達登乘地點，與登乘地點設在一處者除外；
- .2 有寬敞的集結和指導旅客的場地，每個旅客至少須有 0.35 平方米的面積。

## 第 26 條

### 滾裝客船的附加要求

1 本條適用於所有滾裝客船。滾裝客船建造於：

- .1 1998 年 7 月 1 日或之後，應符合第 2.3，2.4，3.1，3.2，3.3，4 和 5 款的要求；
- .2 1986 年 7 月 1 日或之後，1998 年 7 月 1 日之前，應在不晚於 1998 年 7 月 1 日之後的第一個定期檢驗日符合第 5 款的要求，並應在不晚於 2000 年 7 月 1 日之後的第一個定期檢驗日符合第 2.3，2.4，3 和 4 款的要求。
- .3 1986 年 7 月 1 日之前，應在不晚於 1998 年 7 月 1 日之後的第一個定期檢驗日符合第 5 款的要求，並應在不晚於 2000 年 7 月 1 日之後的第一個定期檢驗日符合第 2.1，2.2，2.3，3 和 4 款的要求。

## 2 救生筏

2.1 滾裝客船的救生筏應由符合規則第 6.2 節要求的海上撤離系統或符合規則第 6.1.5 段要求的降落設備提供服務，等量分佈於船舶的每舷。

2.2 滾裝客船的每隻救生筏應配備符合第 13.4 條要求的自由漂浮式存放裝置。

2.3 滾裝客船的每隻救生筏應為裝有符合規則第 4.2.4.1 段或 4.3.4.1 段要求的登乘跳板的型式。

2.4 滾裝客船的每隻救生筏應是自動扶正或是無論哪一面向上漂浮均能在海上保持穩定，並能安全操作的帶頂篷可翻轉救生筏。或者，船舶應配備除救生筏正常定員外，總容量至少為能容納救生艇不能容納的人員總數至少 50%的自動扶正救生筏或帶頂篷可翻轉救生筏。這種額外的救生筏容量應根據船上人員總數和救生艇能容納的人數之差確定。每隻此類救生筏均應由主管機關在考慮到本組織通過的建議書的情況下作出認可。

### 3 快速救助艇

3.1 每艘滾裝客船上的救助艇至少應有一艘是經主管機關在考慮到參考本組織通過的建議書的情況下作出認可的快速救助艇。

3.2 每一快速救助艇應使用經主管機關認可的適當的降落設備。主管機關在認可此種降落設備時，應考慮到快速救助艇即使在十分惡劣的氣候條件下也要降落和回收，並且還應考慮到由本組織通過的建議書。

3.3 每艘快速救助艇上至少有兩個艇員是按《船員培訓、發證和值班規則》（《船員培訓規則》）和本組織通過的建議書定期培訓和訓練的，其中包括救助的各個方面、在各種情況下使用、操縱、管理這些艇及其傾覆後的扶正。

3.4 如因 1997 年 7 月 1 日前建造的滾裝客船的佈置或尺寸妨礙放置第 3.1 款要求的快速救助艇，則該快速救助艇可放置在已被接受作為救助艇的現有救生艇的位置，或者，對於 1986 年 7 月 1 日前建造的船舶，放置在應急艇的位置，但應符合下列所有條件：

- 1 被放置的快速救助艇係使用符合第 3.2 款規定的降落裝置；

.2 由於上述替代而損失的救生艇筏的乘載能力，應通過放置能夠裝載被替代的救生艇能容納的同樣數目人員的救生筏予以補償；

.3 此種救生筏應配備現有降落裝置或海上撤離系統。

#### 4 救助設備

4.1 每艘滾裝客船應配備有效、快速從水中救起倖存者並將其從救助裝置或救生艇筏轉移到船上的設備。

4.2 向船舶轉移倖存者的設備可以是海上撤離系統的一部分，或者是用於救助目的的系統的一部分。

4.3 如果海上撤離系統的滑板旨在用於向船舶甲板轉移倖存者，則滑板應安裝扶手索或梯子以幫助在滑板上攀行。

#### 5 救生衣

5.1 雖有第 7.2 和 2.2.2 條的規定，集合地點附近仍應存放足夠數量的救生衣，以便旅客無需返回其艙室取其救生衣。

5.2 滾裝客船的每一件救生衣均應裝有符合規則第 2.2.3 段要求的燈。

### 第 27 條

#### 旅客信息

1 開航前應對所有客船上的所有人員進行清點。

2 開航前應將已經申明在緊急情況下需要特殊照顧或幫助的人員的細節進行記錄並通知船長。

3 此外，為搜尋和救助計，應在不晚於 1999 年 1 月 1 日對船上所有人員的姓名和性別按成人、兒童和嬰兒分別予以記錄。

4 第 1、2 和 3 款要求的信息應保留在岸上，並在需要時隨時提供給搜救機構。

5 如果此種客船的預定航程使其無法準備此種記錄，主管機關可以免除此種船舶執行第 3 款的要求。

## 第 28 條

### 直升飛機降落和搭乘的區域

1 所有滾裝客船應配備由主管機關在考慮到本組織通過的建議書的情況下認可的直升飛機搭乘區域。

2 1999 年 7 月 1 日或以後建造的長度等於或大於 130 米的客船，應設有由主管機關在考慮到本組織通過的建議書的情況下認可的直升飛機降落區域。



## 第 29 條

### 客船船長決策支持系統

1 本條適用於所有客船。1997 年 7 月 1 日前建造的客船應在不晚於 1999 年 7 月 1 日後的第一個定期檢驗日符合本條的要求。

2 所有客船的駕駛室應備有应急管理決策支持系統。

3 該系統至少應由印刷的一個或多個計劃組成。應急計劃中應確定所有可預見的緊急情況，其中包括但不僅限於以下幾組主要的緊急情況：

- .1 火災；
- .2 船舶受損；
- .3 污染；
- .4 危及船舶安全及其旅客和船員安全的非法行為；
- .5 人身事故；
- .6 貨物的事故；和
- .7 對其他船舶提供緊急援助。

4 應急計劃中確定的應急程序應對船長處理任何綜合緊急情況提供決策支持。

5 應急計劃應統一格式，易於使用。如適當，應將為客船航行穩性而計算的實際裝載情況用於破損控制目的。

6 除印刷的應急計劃外，主管機關亦可接受在駕駛室使用以電腦為基礎的決策支持系統，該系統應能提供應急計劃、程序、檢查清單等中所載的所有信息，而此種信息能提供在可預見的各種緊急情況下採取的建議行動清單。

## 第 30 條

### 演習

1 本條適用於所有客船。

2 客船每周應進行一次棄船演習和消防演習。全體船員無需參加每次的演習，但每個船員必須每月參加一次第 19.3.2 條規定的棄船演習和消防演習。應大力鼓勵旅客參加此種演習。

## 第 III 節

### 貨船

#### (附加要求)

### 第 31 條

#### 救生艇筏和救助艇

#### 1 救生艇筏

##### 1.1 貨船應配備：

- .1 船舶每舷一艘或多艘符合規則第 4.6 節要求的全封閉救生艇，其總容量應能容納船上人員總數；
- .2 此外，一隻或多隻符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏，存放於能在單一開敞甲板層上易於將救生筏從一舷移至另一舷的位置，其總容量應能容納船上的人員總數。如該一隻或多隻救生筏存放於不能在單一開敞甲板層易於從一舷移至另一舷的位置，則每舷可用總容量應足以容納船上人員總數。

##### 1.2 為代替滿足第 1.1 款的要求，貨船可配備：

- .1 一艘或多艘符合規則第 4.7 節要求並能在船尾自由降落下水的自由降落救生艇，其總容量應能容納船上人員總數；
- 和

- .2 此外，船舶每舷一隻或多隻符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏，其總容量能容納船上人員總數。至少在船舶一舷的救生筏應使用降落設備。

1.3 除油輪、化學品船和氣體船外，長度小於 85 米的貨船可以符合下列要求代替滿足第 1.1 或 1.2 款的要求：

- .1 船舶每舷配備一隻或多隻符合規則第 4.2 或 4.3 節要求的氣脹式或鋼性救生筏，其總容量應能容納船上人員總數；
- .2 除非第 1.3.1 款要求的救生筏存放於能在單一開敞甲板層上易於將救生筏從一舷移至另一舷的位置，否則應配備附加救生筏，以使每舷可用總容量能容納船上人員總數的 150%；
- .3 如果第 2 款要求的救助艇亦是符合規則第 4.6 節要求的全封閉救生艇，則其可列入第 1.3.1 款要求的總容量，但船舶每舷可用的總容量至少是船上人員總數的 150%；和
- .4 當發生任何一艘救生艇筏丟失或不能使用的情況時，每舷應有足夠的救生艇筏，包括存放於能在單一甲板層上易於從一舷移至另一舷的位置上的救生艇筏，可供使用以容納船上人員總數。

1.4 凡船艏或船尾頂端至最近救生艇筏的最近一端的水平距離超過 100 米的貨船，除配備第 1.1.2 和 1.2.2 款規定的救生筏外，還應配備一隻救生筏，在合理和可行範圍內，儘量靠前或靠後放置，或一隻儘量靠前，另一隻儘量靠後放置。此一隻或多隻救生筏可按能以手動解脫的方法繫固，而無需為可從經認可的降落裝置降放的型式。

1.5 除第 16.1.1 條提及的救生艇筏外，船上人員總數棄船所需配備的所有救生艇筏應能在發出棄船信號後 10 分鐘的期間內，載足全部定員和屬具降落水中。

1.6 運載散發有毒蒸氣或毒氣的貨物的化學品船和氣體船，應配備符合規則第 4.8 節要求的帶有自儲空氣支持系統的救生艇代替符合規則第 4.6 節要求的全封閉救生艇。

1.7 運載閃點不超過 60°C（閉杯試驗）的貨物的油輪、化學品船和氣體船應配備符合規則第 4.9 節要求的防火救生艇，代替符合規則第 4.6 節要求的全封閉救生艇。

## 2 救助艇

貨船至少應配備 1 艘符合規則第 5.1 節要求的救助艇。如一救生艇亦符合救助艇的要求，可以同意將此艇作為救助艇。

### 3 除救生艇外，1986 年 7 月 1 日前建造的所有貨船還應：

- .1 配備一隻或多隻能從船舶任一舷降落並且總容量能容納船上人員總數的救生筏。該一隻或多隻救生筏應裝有能與下沉中的船舶自動脫開的綁扎或等效繫固設備；和
- .2 凡船艙或船尾頂端至最近救生艇筏的最近一端的水平距離超過 100 米時，除配備第 3.1 款要求的救生筏外，配備一隻救生筏，在合理和可行範圍內，儘量靠前或靠後放置，或一隻儘量靠前，另一隻儘量靠後放置。雖有第 3.1 款的規定，此一隻或多隻救生筏可按能以手動解脫的方法繫固。

## 第 32 條

### 個人救生設備

#### 1 救生圈

1.1 貨船應配備符合第 7.1 條和規則第 2.1 節要求的救生圈，其數量應不少於下表的規定：

船長（米）	最少救生圈數
100 米以下	8
100 米至 150 米以下	10
150 米至 200 米以下	12
200 米及以上	14

1.2 第 7.1.3 條規定的液貨船上的救生圈用自亮燈應是電池型。

#### 2 救生衣燈

2.1 本款適用於所有貨船。

2.2 貨船上的每一件救生衣均應裝有一盞符合規則第 2.2.3 段要求的燈。

2.3 主管機關可接受 1998 年 7 月 1 日前配備在貨船的救生衣上但不完全符合規則第 2.2.3 段要求的燈，直至救生衣燈被正常更換或直至 2001 年 7 月 1 日以後第一次定期檢驗為止，取其早者。

#### 3 浸水服與保溫用具

3.1 本款適用於所有貨船。

3.2 貨船至少應為船上每艘救生艇配備 3 套符合規則第 2.3 節要求的浸水服，或者，如主管機關認為必要和可行，為船上每個人配備一套符合規則第 2.3 節要求的浸水服；但是船舶除了應配備規則第 4.1.5.1.24、4.4.8.31 和 5.1.2.2.13 段要求的保溫用具外，還應為船上未配備浸水服的人員配備符合規則第 2.5 節要求的保溫用具。不必配備這些浸水服和保溫用具，如果該船：

- .1 每舷配有全封閉救生艇，其總容量能容納船上人員總數；或
- .2 配有能在該船船尾自由降落下水的全封閉救生艇，其總容量能容納船上人員總數，並且它們是能從存放處直接登乘和降落下水，與船舶每舷的救生筏一起，其總量能容納船上人員總數；或
- .3 一直從事溫暖氣候航區航行，主管機關認為無須配備浸水服。

3.3 符合第 31.1.3 條要求的貨船應為船上每個人配備符合規則第 2.3 節要求的浸水服，除非該船：

- .1 配有吊筏架降落的救生筏；或
- .2 配有由在船舶兩舷均能使用並且不要求降入水中方可登筏的等效經認可設備操作的救生筏；或
- .3 一直從事溫暖氣候航區航行，主管機關認為無須配備浸水服。

3.4 本條要求的浸水服可用以符合第 7.3 條的要求。

3.5 第 3.2.1 和 3.2.2 款提及的在 1986 年 7 月 1 日前建造的貨船上配備的全封閉救生艇無需符合規則第 4.6 節的要求。

### 第 33 條

#### 救生艇筏的登乘和降落佈置

1 貨船救生艇筏的登乘佈置應設計為，救生艇可從存放處直接登乘和降落，吊架降落救生筏可從存放處的緊鄰位置或降放前移至第 13.5 條規定的位置登乘和降落。

2 總噸位等於和大於 20,000 噸的貨船，其救生艇應能在該船於平靜水面中前進速度達 5 節時降落下水，必要時可利用艇艙纜。

### 第 IV 節

#### 救生設備及裝置要求

### 第 34 條

所有救生設備及裝置均應符合規則的有關要求。



## 第 V 節

### 其他

#### 第 35 條

##### 訓練手冊和船上訓練設備

1 本條適用於所有船舶。

2 每個船員餐廳和娛樂室或者每個船員艙室應備有符合第 3 款要求的訓練手冊。

3 該訓練手冊可分成若干分冊，應包括關於船上所配備的救生設備和最佳救生方法的須知和信息，使用易懂措詞，凡可能時加以圖解。這些信息的任何部分都可用視聽輔助教材的方式提供，以代替手冊。下列各項應加詳細解釋：

- .1 救生衣，浸水服和防暴露服（視情而定）的穿著方法；
- .2 指定地點的集合；
- .3 救生艇筏和救助艇的登乘、降落和離開，如適當時，還包括對海上撤離系統的使用；
- .4 從救生艇筏內降落的方法；
- .5 從降落設備上脫開；
- .6 降落區域內的防護方法與防護設備用法（如適當）；

- .7 降落區域的照明；
- .8 所有救生屬具的用法；
- .9 所有探測裝備的用法；
- .10 用圖解說明無線電救生設備的用法；
- .11 浮錨的用法；
- .12 發動機及輔助設備的用法；
- .13 救生艇筏和救助艇的回收，包括存放和繫固；
- .14 露光的危險和穿用保暖服裝的必要性；
- .15 為了倖存，救生艇筏設備的最佳用法；
- .16 救人的方法，包括直升機救助裝置（吊繩，吊藍和吊擔架），連褲救生圈，岸上救生工具和船舶拋繩設備的用法；
- .17 應變部署表與應變須知所列出的所有其他職責；
- .18 救生設備應急修理須知。

4 每艘裝有海上撤離系統的船舶均應備有關於使用該系統的船上訓練設備。

## 第 36 條

### 船上維護保養須知

救生設備的船上維護保養須知應易懂，凡可能時加以圖解，並且，如適當時，每種設備應包括下列各項：

- .1 進行第 20.7 條規定的檢驗時使用的檢查表；
- .2 維護保養和修理須知；
- .3 定期維護保養計劃表；
- .4 潤滑點示意圖，並註明建議用的潤滑劑；
- .5 可替換部件一覽表；
- .6 備件來源一覽表；和
- .7 檢驗和維護保養記錄簿。

## 第 37 條

### 應變部署表與應變須知

1 應變部署表應寫明規則第 7.2 節所規定的通用緊急警報和公共廣播系統的細節以及在發出該警報時船員和旅客應採取的行動。應變部署表還應寫明棄船命令將如何發出。

2 每艘客船應備有尋找和救助陷在其艙室的旅客的程序。

3 應變部署表應寫明分派給各船員的任務，包括：

- .1 船上水密門、防火門、閘門、排水孔、船舷小窗、天窗、舷窗和其他類似開口的關閉；
- .2 救生艇筏和其他救生設備的裝備；
- .3 救生艇筏的準備工作和降落；
- .4 其他救生設備的一般準備工作；
- .5 集合旅客；
- .6 通信設備的用法；
- .7 指定處理火災的消防人員的配備；和
- .8 指定有關使用消防設備及裝置方面的專門任務。

4 應變部署表應指明哪些高級船員負責保證維護救生和消防設備，使其處於良好狀態，並隨時可用。

5 應變部署表應指明關鍵人員可能傷殘後的替換人員，要考慮不同的緊急情況可能需要採取不同的行動。

6 應變部署表應指明在緊急情況下指定給船員的與旅客有關的各項任務。這些任務應包括：

- .1 向旅客報警；
- .2 查看旅客服裝穿著是否適當以及救生衣穿著是否正確；
- .3 在各集合地點召集旅客；
- .4 維持通道和梯道秩序，大體控制旅客動態；和

.5 確保將毯子送到救生艇上。

7 應變部署表應在船舶開航前制定。在應變部署表制定後，如因船員變動而必須更改應變部署表時，船長應修改該表或制定新表。

8 客船用應變部署表的格式應經認可。

## 第 VI 章

### 貨物裝運

#### 第 2 條 — 貨物信息

9 以下列條文代替現有的第 2 款的第 2 項：

“.2 如果是散裝貨物，應提供有關貨物的積載因素，平艙程序，可能的移動包括靜止角，如適用，以及其他有關特性的信息。如果是濃縮貨物或其他可能液化的貨物，應以證書的形式說明貨物的含水率及其可運輸含水率的極限等其他信息。”

#### 第 7 條 — 散裝貨物的積載

10 以下列條文代替現有第 7 條：

## “第 7 條

### 散裝貨物的裝卸與積載

1 就本條而言，碼頭代表係指當船舶裝卸貨時，由碼頭或其他設施指定的，就該船所進行的作業對碼頭或設施負有責任的人。

2 為使船長能夠防止船舶結構受到過大的應力，船舶應備有用負責貨物操作的高級船員熟悉的語文寫成的手冊。如果該語文不是英文，則船舶還應備有一本用英文寫成的手冊。該手冊至少應包括：

- .1 第 II-1/22 條要求的穩性數據；
- .2 壓載和卸壓載率和容量；
- .3 艙頂板單位表面積的最大允許負荷；
- .4 每艙最大允許負荷；
- .5 關於船舶結構強度的一般性裝卸須知，包括裝卸、壓載操作過程中和航行期間對最惡劣操作條件的任何限制；
- .6 諸如由主管機關或經其認可的組織提出的關於最惡劣操作條件限制的任何特殊限制（如適用）；和
- .7 要求計算強度時，在裝卸過程中和航行期間船殼最大允許的力和力矩。

3 在裝卸固體散貨前，船長和碼頭代表應達成一項方案，該方案應在考慮到裝卸速度、裝貨次數以及船舶壓載或卸壓載的情況下，確保船舶在裝卸作業過程中，不超過其允許的力和力矩，並應包括裝卸

的順序、數量和速率。該方案及其隨後的任何修正應存放在港口國的適當當局。

4 散裝貨物應視必要裝載並平艙至貨物處所邊界的合理水平，以便最大程度地減少貨物移動的危險並確保在整個航程中能保持足夠的穩性。

5 如散裝貨物裝載於雙層甲板，當裝載信息表明如果艙蓋敞開會使底部結構承受不可接受的應力時，則此種雙層甲板的艙蓋必須關閉。貨物應予合理水平地平艙並向兩側延伸或者使用具有足夠強度的附加縱向隔板進行固定。應觀察雙層甲板的安全裝載容量，確保甲板結構不至過載。

6 船長和碼頭代表應確保裝卸作業按同意的方案進行。

7 如果在裝卸過程中裝卸繼續時第 2 款提及的船舶的任何限制被突破或者有可能突破，船長有權中止作業並有責任通知保存該方案的港口國適當當局。船長和碼頭代表應確保採取正確行動。在卸貨時，船長和碼頭代表應確保卸貨方式不會對船舶結構造成損害。

8 船長必須確保船上人員連續監視貨物作業。當可行時，在裝卸過程中應定時核查船舶的吃水，以確認所提供的噸位數。每次對吃水和噸位的觀察均應記入貨物記錄簿中。如發現與同意的方案有重大偏差，應對貨物或壓載作業或兩者作業進行調整，以確保偏差得到糾正。”

## 第 XI 章

### 增進海上安全的特別措施

#### 第 1 條 – 對經認可的組織的授權

11 以下列條文代替本條的現有條文：

“規則 I/6 提及的組織，應遵守本組織可能修正的本組織以第 A.739 (18) 號決議通過的指南和本組織可能修正的本組織以第 A.789 (19) 號決議通過的規範，但此種修正案應係按照本公約第 VIII 條有關適用於附件除第 1 章外的修正程序的規定通過、生效和執行。”



**RESOLUTION MSC.47(66)**  
**(adopted on 4 June 1996)**

**ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE  
SAFETY OF LIFE AT SEA, 1974**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING FURTHER article VIII(b) of the International Convention for the Safety of Life at Sea (SOLAS), 1974, hereinafter referred to as "the Convention", concerning the procedures for amending the Annex to the Convention, other than the provisions of chapter I thereof,

HAVING CONSIDERED, at its sixty-sixth session, amendments to the Convention proposed and circulated in accordance with article VIII(b)(i) thereof,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the Convention the text of which is set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 January 1998, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;
3. INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 July 1998 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the Convention;
5. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its Annex to Members of the Organization, which are not Contracting Governments to the Convention.

## ANNEX

**AMENDMENTS TO THE INTERNATIONAL CONVENTION  
FOR THE SAFETY OF LIFE AT SEA, 1974****Chapter II-1****CONSTRUCTION - SUBDIVISION AND STABILITY, MACHINERY  
AND ELECTRICAL INSTALLATIONS**

- 1 The existing title of chapter II-1 is replaced by the following:  
  
"CONSTRUCTION - STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS"
- 2 The following new part A-1 is inserted between part A and part B:

**"PART A-1****STRUCTURE OF SHIPS****Regulation 3-1****Structural, mechanical and electrical requirements for ships**

In addition to the requirements contained elsewhere in the present regulations, ships shall be designed, constructed and maintained in compliance with the structural, mechanical and electrical requirements of a classification society which is recognized by the Administration in accordance with the provisions of regulation XI/1, or with applicable national standards of the Administration which provide an equivalent level of safety.

**Regulation 3-2****Corrosion prevention of seawater ballast tanks**

- 1 This regulation applies to oil tankers and bulk carriers constructed on or after 1 July 1998.
- 2 All dedicated seawater ballast tanks shall have an efficient corrosion prevention system, such as hard protective coatings or equivalent. The coatings should preferably be of a light colour. The scheme for the selection, application and maintenance of the system shall be approved by the Administration, based on the guidelines adopted by the Organization. Where appropriate, sacrificial anodes shall also be used."

**Regulation 8 - Stability of passenger ships in damaged condition**

3 The following is added at the end of paragraph 2.3.1:

"This range may be reduced to a minimum of 10°, in the case where the area under the righting lever curve is that specified in paragraph 2.3.2, increased by the ratio:

$$\frac{15}{\text{Range}}$$

where the range is expressed in degrees."

4 The words "range specified in 2.3.1" in paragraph 2.3.3 are replaced by the words "range of positive stability".

**Regulation 25-1 - Application**

5 The following sentence is added at the end of existing paragraph 1:

"The requirements in this part shall also apply to cargo ships of 80 m in  $L_s$  and upwards but not exceeding 100 m in  $L_s$  constructed on or after 1 July 1998 "

**Regulation 25-3 - Required subdivision index R**

6 Existing paragraph 2 is replaced by the following:

"2 The degree of subdivision to be provided shall be determined by the required subdivision index R, as follows:

.1 for ships over 100 m in  $L_s$ :

$$R = (0.002 + 0.0009L_s)^{1/2},$$

where  $L_s$  is in metres; and

.2 for ships of 80 m in  $L_s$  and upwards but not exceeding 100 m in length  $L_s$ :

$$R = 1 - \left[ 1 - \left( 1 - \frac{L_s}{100} \cdot \frac{R_o}{1 - R_o} \right) \right],$$

where  $R_o$  is the value R as calculated in accordance with the formula in subparagraph .1."

**Regulation 45 - Precautions against shock, fire and other hazards of electrical origin**

7 The words "55 V" in paragraph 1.1.1 are replaced by "50 V".

- 8 The existing text of chapter III is replaced by the following:

**"CHAPTER III  
LIFE-SAVING APPLIANCES AND ARRANGEMENTS**

**PART A - GENERAL**

**Regulation 1**

**Application**

- 1 Unless expressly provided otherwise, this chapter shall apply to ships the keels of which are laid or which are at a similar stage of construction on or after 1 July 1998.
- 2 For the purpose of this chapter the term *a similar stage of construction* means the stage at which:
- .1 construction identifiable with a specific ship begins; and
  - .2 assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is less.
- 3 For the purpose of this chapter:
- .1 the expression *ships constructed* means *ships the keels of which are laid or which are at a similar stage of construction*;
  - .2 the expression *all ships* means ships constructed before, on or after 1 July 1998; the expressions *all passenger ships* and *all cargo ships* shall be construed accordingly;
  - .3 a cargo ship, whenever built, which is converted to a passenger ship shall be treated as a passenger ship constructed on the date on which such a conversion commences.
- 4 For ships constructed before 1 July 1998, the Administration shall:
- .1 ensure that, subject to the provisions of paragraph 4.2, the requirements which are applicable under chapter III of the International Convention for the Safety of Life at Sea, 1974, in force prior to 1 July 1998 to new or existing ships as prescribed by that chapter are complied with; and
  - .2 ensure that when life-saving appliances or arrangements on such ships are replaced or such ships undergo repairs, alterations or modifications of a major character which involve replacement of, or any addition to, their existing life-saving appliances or arrangements, such life-saving appliances or arrangements, in so far as is reasonable and practicable, comply with the requirements of this chapter. However, if a survival craft other than an inflatable liferaft is replaced without replacing its launching appliance, or vice versa, the survival craft or launching appliance may be of the same type as that replaced.

## Regulation 2

### Exemptions

1 The Administration may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific requirements of this chapter unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships which, in the course of their voyage, do not proceed more than 20 miles from the nearest land.

2 In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Administration, if satisfied that it is impracticable to enforce compliance with the requirements of this chapter, may exempt such ships from those requirements, provided that such ships comply fully with the provisions of:

- .1 the rules annexed to the Special Trade Passenger Ships Agreement, 1971; and
- .2 the rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973.

## Regulation 3

### Definitions

For the purpose of this chapter, unless expressly provided otherwise:

1 *Anti-exposure suit* is a protective suit designed for use by rescue boat crews and marine evacuation system parties.

2 *Certificated person* is a person who holds a certificate of proficiency in survival craft issued under the authority of, or recognized as valid by, the Administration in accordance with the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, in force; or a person who holds a certificate issued or recognized by the Administration of a State not a Party to that Convention for the same purpose as the convention certificate.

3 *Detection* is the determination of the location of survivors or survival craft.

4 *Embarkation ladder* is the ladder provided at survival craft embarkation stations to permit safe access to survival craft after launching.

5 *Float-free launching* is that method of launching a survival craft whereby the craft is automatically released from a sinking ship and is ready for use.

6 *Free-fall launching* is that method of launching a survival craft whereby the craft with its complement of persons and equipment on board is released and allowed to fall into the sea without any restraining apparatus.

7 *Immersion suit* is a protective suit which reduces the body heatloss of a person wearing it in cold water.

8 *Inflatable appliance* is an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is normally kept uninflated until ready for use.

9 *Inflated appliance* is an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is kept inflated and ready for use at all times.

10 *International Life-Saving Appliance (LSA) Code* (referred to as "the Code" in this chapter) means the International Life-Saving Appliance (LSA) Code adopted by the Maritime Safety Committee of the Organization by resolution MSC.48(66), as it may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the Annex other than chapter I.

11 *Launching appliance or arrangement* is a means of transferring a survival craft or rescue boat from its stowed position safely to the water.

12 *Length* is 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this is measured shall be parallel to the designed waterline.

13 *Lightest sea-going condition* is the loading condition with the ship on even keel, without cargo, with 10% stores and fuel remaining and in the case of a passenger ship with the full number of passengers and crew and their luggage.

14 *Marine evacuation system* is an appliance for the rapid transfer of persons from the embarkation deck of a ship to a floating survival craft

15 *Moulded depth*

- .1 The moulded depth is the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side. In wood and composite ships the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.
- .2 In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design.
- .3 Where the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the moulded depth shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.

16 *Novel life-saving appliance or arrangement* is a life-saving appliance or arrangement which embodies new features not fully covered by the provisions of this chapter or the Code but which provides an equal or higher standard of safety.

17 *Positive stability* is the ability of a craft to return to its original position after the removal of a heeling moment.

18 *Recovery time* for a rescue boat is the time required to raise the boat to a position where persons on board can disembark to the deck of the ship. Recovery time includes the time required to make preparations for recovery on board the rescue boat such as passing and securing a painter, connecting the rescue boat to the launching appliance, and the time to raise the rescue boat. Recovery time does not include the time needed to lower the launching appliance into position to recover the rescue boat.

19 *Rescue boat* is a boat designed to rescue persons in distress and to marshal survival craft.

20 *Retrieval* is the safe recovery of survivors.

21 *Ro-ro passenger ship* means a passenger ship with ro-ro cargo spaces or special category spaces as defined in regulation II-2/3.

22 *Short international voyage* is an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the ship commences its return voyage to the country in which the voyage began.

23 *Survival craft* is a craft capable of sustaining the lives of persons in distress from the time of abandoning the ship.

24 *Thermal protective aid* is a bag or suit made of waterproof material with low thermal conductance.

#### Regulation 4

##### Evaluation, testing and approval of life-saving appliances and arrangements

1 Except as provided in paragraphs 5 and 6, life-saving appliances and arrangements required by this chapter shall be approved by the Administration.

2 Before giving approval to life-saving appliances and arrangements, the Administration shall ensure that such life-saving appliances and arrangements:

- .1 are tested, to confirm that they comply with the requirements of this chapter and the Code, in accordance with the recommendations of the Organization; or
- .2 have successfully undergone, to the satisfaction of the Administration, tests which are substantially equivalent to those specified in those recommendations.

3 Before giving approval to novel life-saving appliances or arrangements, the Administration shall ensure that such appliances or arrangements:

- .1 provide safety standards at least equivalent to the requirements of this chapter and the Code and have been evaluated and tested in accordance with the recommendations of the Organization; or

- .2 have successfully undergone, to the satisfaction of the Administration, evaluation and tests which are substantially equivalent to those recommendations.
- 4 Procedures adopted by the Administration for approval shall also include the conditions whereby approval would continue or would be withdrawn.
- 5 Before accepting life-saving appliances and arrangements that have not been previously approved by the Administration, the Administration shall be satisfied that life-saving appliances and arrangements comply with the requirements of this chapter and the Code
- 6 Life-saving appliances required by this chapter for which detailed specifications are not included in the Code shall be to the satisfaction of the Administration.

#### **Regulation 5**

##### **Production tests**

The Administration shall require life-saving appliances to be subjected to such production tests as are necessary to ensure that the life-saving appliances are manufactured to the same standard as the approved prototype.

### **PART B - REQUIREMENTS FOR SHIPS AND LIFE-SAVING APPLIANCES**

#### **SECTION I - PASSENGER SHIPS AND CARGO SHIPS**

##### **Regulation 6**

##### **Communications**

- 1 Paragraph 2 applies to all passenger ships and to all cargo ships of 300 gross tonnage and upwards.
- 2 **Radio life-saving appliances**
- 2.1 Two-way VHF radiotelephone apparatus
- 2.1.1 At least three two-way VHF radiotelephone apparatus shall be provided on every passenger ship and on every cargo ship of 500 gross tonnage and upwards. At least two two-way VHF radiotelephone apparatus shall be provided on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such apparatus shall conform to performance standards not inferior to those adopted by the Organization. If a fixed two-way VHF radiotelephone apparatus is fitted in a survival craft it shall conform to performance standards not inferior to those adopted by Organization.
- 2.1.2 Two-way VHF radiotelephone apparatus provided on board ships prior to 1 February 1992 and not complying fully with the performance standards adopted by the Organization may be accepted by the Administration until 1 February 1999 provided the Administration is satisfied that they are compatible with approved two-way VHF radiotelephone apparatus.



## 2.2 Radar transponders

At least one radar transponder shall be carried on each side of every passenger ship and of every cargo ship of 500 gross tonnage and upwards. At least one radar transponder shall be carried on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such radar transponders shall conform to performance standards not inferior to those adopted by the Organization. The radar transponders shall be stowed in such locations that they can be rapidly placed in any survival craft other than the liferaft or liferafts required by regulation 31.1.4. Alternatively, one radar transponder shall be stowed in each survival craft other than those required by regulation 31.1.4. On ships carrying at least two radar transponders and equipped with free-fall lifeboats one of the radar transponders shall be stowed in a free-fall lifeboat and the other located in the immediate vicinity of the navigation bridge so that it can be utilized on board and ready for transfer to any of the other survival craft.

## 3 Distress flares

Not less than 12 rocket parachute flares, complying with the requirements of section 3.1 of the Code, shall be carried and be stowed on or near the navigation bridge.

## 4 On-board communications and alarm systems

4.1 An emergency means comprised of either fixed or portable equipment or both shall be provided for two-way communications between emergency control stations, muster and embarkation stations and strategic positions on board.

4.2 A general emergency alarm system complying with the requirements of paragraph 7.2.1 of the Code shall be provided and shall be used for summoning passengers and crew to muster stations and to initiate the actions included in the muster list. The system shall be supplemented by either a public address system complying with the requirements of paragraph 7.2.2 of the Code or other suitable means of communication. Entertainment sound systems shall automatically be turned off when the general emergency alarm system is activated.

4.3 On passenger ships the general emergency alarm system shall be audible on all open decks.

4.4 On ships fitted with a marine evacuation system communication between the embarkation station and the platform or the survival craft shall be ensured.

## 5 Public address systems on passenger ships

5.1 In addition to the requirements of regulation II-2/40.5 or regulation II-2/41.2, as appropriate, and of paragraph 6.4.2, all passenger ships shall be fitted with a public address system. With respect to passenger ships constructed before 1 July 1997 the requirements of paragraphs 5.2 and 5.4, subject to the provisions of paragraph 5.5, shall apply not later than the date of the first periodical survey after 1 July 1997.

5.2 The public address system shall be clearly audible above the ambient noise in all spaces, prescribed by paragraph 7.2.2.1 of the Code, and shall be provided with an override function controlled from one location on the navigation bridge and such other places on board as the Administration deems necessary, so that all emergency messages will be broadcast if any loudspeaker in the spaces concerned has been switched off, its volume has been turned down or the public address system is used for other purposes.

- 5.3 On passenger ships constructed on or after 1 July 1997:
- .1 the public address system shall have at least two loops which shall be sufficiently separated throughout their length and have two separate and independent amplifiers; and
  - .2 the public address system and its performance standards shall be approved by the Administration having regard to the recommendations adopted by the Organization.
- 5.4 The public address system shall be connected to the emergency source of electrical power required by regulation II-1/42.2.2.
- 5.5 Ships constructed before 1 July 1997 which are already fitted with the public address system approved by the Administration which complies substantially with those required by paragraphs 5.2 and 5.4 above and paragraph 7.2.2.1 of the Code are not required to change their system.

### **Regulation 7**

#### **Personal life-saving appliances**

#### **1 Lifebuoys**

- 1.1 Lifebuoys complying with the requirements of paragraph 2.1.1 of the Code shall be:
- .1 so distributed as to be readily available on both sides of the ship and as far as practicable on all open decks extending to the ship's side; at least one shall be placed in the vicinity of the stern; and
  - .2 so stowed as to be capable of being rapidly cast loose, and not permanently secured in any way.
- 1.2 At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline complying with the requirements of paragraph 2.1.4 of the Code equal in length to not less than twice the height at which it is stowed above the waterline in the lightest seagoing condition, or 30 m, whichever is the greater.
- 1.3 Not less than one half of the total number of lifebuoys shall be provided with lifebuoy self-igniting lights complying with the requirements of paragraph 2.1.2 of the Code; not less than two of these shall also be provided with lifebuoy self-activating smoke signals complying with the requirements of paragraph 2.1.3 of the Code and be capable of quick release from the navigation bridge; lifebuoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the ship and shall not be the lifebuoys provided with lifelines in compliance with the requirements of paragraph 1.2.
- 1.4 Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.

## **2 Lifejackets**

2.1 A lifejacket complying with the requirements of paragraph 2.2.1 or 2.2.2 of the Code shall be provided for every person on board the ship and, in addition:

- .1 a number of lifejackets suitable for children equal to at least 10% of the number of passengers on board shall be provided or such greater number as may be required to provide a lifejacket for each child; and
- .2 a sufficient number of lifejackets shall be carried for persons on watch and for use at remotely located survival craft stations. The lifejackets carried for persons on watch should be stowed on the bridge, in the engine control room and at any other manned watch station.

2.2 Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated. Where, due to the particular arrangements of the ship, the lifejackets provided in compliance with the requirements of paragraph 2.1 may become inaccessible, alternative provisions shall be made to the satisfaction of the Administration which may include an increase in the number of lifejackets to be carried.

2.3 The lifejackets used in totally enclosed lifeboats, except free-fall lifeboats, shall not impede entry into the lifeboat or seating, including operation of the seat belts in the lifeboat.

2.4 Lifejackets selected for free-fall lifeboats, and the manner in which they are carried or worn, shall not interfere with entry into the lifeboat, occupant safety or operation of the lifeboat.

## **3 Immersion suits and anti-exposure suits**

An immersion suit, complying with the requirements of section 2.3 of the Code or an anti-exposure suit complying with section 2.4 of the Code, of an appropriate size, shall be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party. If the ship is constantly engaged in warm climates where, in the opinion of the Administration, thermal protection is unnecessary, this protective clothing need not be carried.

### **Regulation 8**

#### **Muster list and emergency instructions**

- 1 This regulation applies to all ships.
- 2 Clear instructions to be followed in the event of an emergency shall be provided for every person on board. In the case of passenger ships these instructions shall be drawn up in the language or languages required by the ship's flag State and in the English language.
- 3 Muster lists and emergency instructions complying with the requirements of regulation 37 shall be exhibited in conspicuous places throughout the ship including the navigation bridge, engine-room and crew accommodation spaces.
- 4 Illustrations and instructions in appropriate languages shall be posted in passenger cabins and be conspicuously displayed at muster stations and other passenger spaces to inform passengers of:

- 1 their muster station,
- .2 the essential actions they must take in an emergency; and
- 3 the method of donning lifejackets.

#### **Regulation 9**

##### **Operating instructions**

- 1 This regulation applies to all ships
- 2 Posters or signs shall be provided on or in the vicinity of survival craft and their launching controls and shall:
  - .1 illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;
  - .2 be easily seen under emergency lighting conditions; and
  - .3 use symbols in accordance with the recommendations of the Organization.

#### **Regulation 10**

##### **Manning of survival craft and supervision**

- 1 This regulation applies to all ships
- 2 There shall be a sufficient number of trained persons on board for mustering and assisting untrained persons.
- 3 There shall be a sufficient number of crew members, who may be deck officers or certificated persons, on board for operating the survival craft and launching arrangements required for abandonment by the total number of persons on board.
- 4 A deck officer or certificated person shall be placed in charge of each survival craft to be used. However, the Administration, having due regard to the nature of the voyage, the number of persons on board and the characteristics of the ship, may permit persons practised in the handling and operation of liferafts to be placed in charge of liferafts in lieu of persons qualified as above. A second-in-command shall also be nominated in the case of lifeboats.
- 5 The person in charge of the survival craft shall have a list of the survival craft crew and shall see that the crew under his command are acquainted with their duties. In lifeboats the second-in-command shall also have a list of the lifeboat crew.
- 6 Every motorized survival craft shall have a person assigned who is capable of operating the engine and carrying out minor adjustments.
- 7 The master shall ensure the equitable distribution of persons referred to in paragraphs 2, 3 and 4 among the ship's survival craft.

## Regulation 11

### Survival craft muster and embarkation arrangements

- 1 Lifeboats and liferafts for which approved launching appliances are required shall be stowed as close to accommodation and service spaces as possible.
- 2 Muster stations shall be provided close to the embarkation stations. Each muster station shall have sufficient clear deck space to accommodate all persons assigned to muster at that station, but at least 0.35 m<sup>2</sup> per person.
- 3 Muster and embarkation stations shall be readily accessible from accommodation and work areas.
- 4 Muster and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate.
- 5 Alleyways, stairways and exits giving access to the muster and embarkation stations shall be lighted. Such lighting shall be capable of being supplied by the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate. In addition to and as part of the markings required under regulation II-2/28.1.10, routes to muster stations shall be indicated with the muster station symbol, intended for that purpose, in accordance with the Recommendations of the Organization.
- 6 Davit-launched and free-fall launched survival craft muster and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.
- 7 An embarkation ladder complying with the requirements of paragraph 6.1.6 of the Code extending, in a single length, from the deck to the waterline in the lightest seagoing condition under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship. However, the Administration may permit such ladders to be replaced by approved devices to afford access to the survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship. Other means of embarkation enabling descent to the water in a controlled manner may be permitted for the liferafts required by regulation 31.1.4.
- 8 Where necessary, means shall be provided for bringing the davit-launched survival craft against the ship's side and holding them alongside so that persons can be safely embarked.

## Regulation 12

### Launching stations

Launching stations shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as possible, survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship. If positioned forward, they shall be located abaft the collision bulkhead in a sheltered position and, in this respect, the Administration shall give special consideration to the strength of the launching appliance.

### Regulation 13

#### Stowage of survival craft

- 1 Each survival craft shall be stowed:
  - 1 so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;
  - 2 as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw-overboard launching, in such a position that the survival craft in the embarkation position is not less than 2 m above the waterline with the ship in the fully loaded condition under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way, or to the angle at which the ship's weather deck edge becomes submerged, whichever is less;
  - 3 in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 min;
  - 4 fully equipped as required by this chapter and the Code; and
  - 5 as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. In particular, survival craft on tankers, other than the liferafts required by regulation 31.1.4, shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.
- 2 Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On cargo ships of 80 m in length and upwards but less than 120 m in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On cargo ships of 120 m in length and upwards and passenger ships of 80 m in length and upwards, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.
- 3 Lifeboats shall be stowed attached to launching appliances.
  - 4.1 Every liferaft shall be stowed with its painter permanently attached to the ship.
  - 4.2 Each liferaft or group of liferafts shall be stowed with a float-free arrangement complying with the requirements of paragraph 4.1.6 of the Code so that each floats free and, if inflatable, inflates automatically when the ship sinks.
  - 4.3 Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.
  - 4.4 Paragraphs 4.1 and 4.2 do not apply to liferafts required by regulation 31.1.4.

5 Davit-launched liferafts shall be stowed within reach of the lifting hooks, unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in paragraph 1.2 or by ship motion or power failure.

6 Liferafts intended for throw-overboard launching shall be so stowed as to be readily transferable for launching on either side of the ship unless liferafts, of the aggregate capacity required by regulation 31.1 to be capable of being launched on either side, are stowed on each side of the ship.

#### **Regulation 14**

##### **Stowage of rescue boats**

Rescue boats shall be stowed:

- .1 in a state of continuous readiness for launching in not more than 5 min;
- .2 in a position suitable for launching and recovery;
- .3 so that neither the rescue boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and
- .4 if it is also a lifeboat, in compliance with the requirements of regulation 13.

#### **Regulation 15**

##### **Stowage of marine evacuation systems**

1 The ship's side shall not have any openings between the embarkation station of the marine evacuation system and the waterline in the lightest seagoing condition and means shall be provided to protect the system from any projections.

2 Marine evacuation systems shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as practicable, the system can be launched down the straight side of the ship.

3 Each marine evacuation system shall be stowed so that neither the passage nor platform nor its stowage or operational arrangements will interfere with the operation of any other life-saving appliance at any other launching station.

4 Where appropriate, the ship shall be so arranged that the marine evacuation systems in their stowed positions are protected from damage by heavy seas.

#### **Regulation 16**

##### **Survival craft launching and recovery arrangements**

1 Unless expressly provided otherwise, launching and embarkation appliances complying with the requirements of section 6.1 of the Code shall be provided for all survival craft except those which are:

- .1 boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which have a mass of not more than 185 kg; or

- .2 boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which are stowed for launching directly from the stowed position under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way; or
- .3 carried in excess of the survival craft for 200% of the total number of persons on board the ship and which have a mass of not more than 185 kg; or
- .4 carried in excess of the survival craft for 200% of the total number of persons on board the ship, are stowed for launching directly from the stowed position under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way; or
- .5 provided for use in conjunction with a marine evacuation system, complying with the requirements of section 6.2 of the Code and stowed for launching directly from the stowed position under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way.

2 Each lifeboat shall be provided with an appliance which is capable of launching and recovering the lifeboat. In addition, there shall be provision for hanging-off the lifeboat to free the release gear for maintenance.

3 Launching and recovery arrangements shall be such that the appliance operator on the ship is able to observe the survival craft at all times during launching and for lifeboats during recovery.

4 Only one type of release mechanism shall be used for similar survival craft carried on board the ship.

5 Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.

6 Falls, where used, shall be long enough for the survival craft to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way.

7 During preparation and launching, the survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate.

8 Means shall be available to prevent any discharge of water on to survival craft during abandonment.

9 If there is a danger of the survival craft being damaged by the ship's stabilizer wings, means shall be available, powered by an emergency source of energy, to bring the stabilizer wings inboard; indicators operated by an emergency source of energy shall be available on the navigation bridge to show the position of the stabilizer wings.



10 If partially enclosed lifeboats complying with the requirements of section 4.5 of the Code are carried, a davit span shall be provided, fitted with not less than two lifelines of sufficient length to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of a trim of up to 10° and a list of up to 20° either way.

#### **Regulation 17**

##### **Rescue boat embarkation, launching and recovery arrangements**

1 The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time.

2 If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of regulations 11 and 12.

3 Launching arrangements shall comply with the requirements of regulation 16. However, all rescue boats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.

4 Recovery time of the rescue boat shall be not more than 5 min in moderate sea conditions when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, this recovery time shall be possible when loaded with its lifeboat equipment and the approved rescue boat complement of at least six persons.

5 Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.

#### **Regulation 18**

##### **Line-throwing appliances**

A line-throwing appliance complying with the requirements of section 7.1 of the Code shall be provided.

#### **Regulation 19**

##### **Emergency training and drills**

1 This regulation applies to all ships.

##### **2 Familiarity with safety installations and practice musters**

2.1 Every crew member with assigned emergency duties shall be familiar with these duties before the voyage begins.

2.2 On a ship engaged on a voyage where passengers are scheduled to be on board for more than 24 h, musters of the passengers shall take place within 24 h after their embarkation. Passengers shall be instructed in the use of the lifejackets and the action to take in an emergency.

2.3 Whenever new passengers embark, a passenger safety briefing shall be given immediately before sailing, or immediately after sailing. The briefing shall include the instructions required by regulations 8.2 and 8.4, and shall be made by means of an announcement, in one or more languages likely to be understood by the passengers. The announcement shall be made on the ship's public address system, or by other equivalent means likely to be heard at least by the passengers who have not yet heard it during the voyage. The briefing may be included in the muster required by paragraph 2.2 if the muster is held immediately upon departure. Information cards or posters or video programmes displayed on ships video displays may be used to supplement the briefing, but may not be used to replace the announcement.

### **3 Drills**

3.1 Drills shall, as far as practicable, be conducted as if there were an actual emergency.

3.2 Every crew member shall participate in at least one abandon ship drill and one fire drill every month. The drills of the crew shall take place within 24 h of the ship leaving a port if more than 25% of the crew have not participated in abandon ship and fire drills on board that particular ship in the previous month. When a ship enters service for the first time, after modification of a major character or when a new crew is engaged, these drills shall be held before sailing. The Administration may accept other arrangements that are at least equivalent for those classes of ships for which this is impracticable.

#### **3.3 Abandon ship drill**

3.3.1 Each abandon ship drill shall include:

- .1 summoning of passengers and crew to muster stations with the alarm required by regulation 6.4.2 followed by drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship;
- .2 reporting to stations and preparing for the duties described in the muster list;
- .3 checking that passengers and crew are suitably dressed;
- .4 checking that lifejackets are correctly donned;
- .5 lowering of at least one lifeboat after any necessary preparation for launching;
- .6 starting and operating the lifeboat engine;
- .7 operation of davits used for launching liferafts;
- .8 a mock search and rescue of passengers trapped in their staterooms; and
- .9 instruction in the use of radio life-saving appliances.

3.3.2 Different lifeboats shall, as far as practicable, be lowered in compliance with the requirements of paragraph 3.3.1.5 at successive drills.

3.3.3 Except as provided in paragraphs 3.3.4 and 3.3.5 each lifeboat shall be launched with its assigned operating crew aboard and manoeuvred in the water at least once every 3 months during an abandon ship drill.

3.3.4 Lowering into the water, rather than launching of a lifeboat arranged for free-fall launching, is acceptable where free-fall launching is impracticable provided the lifeboat is free-fall launched with its assigned operating crew aboard and manoeuvred in the water at least once every 6 months. However, in cases where it is impracticable, the Administration may extend this period to 12 months provided that arrangements are made for simulated launching which will take place at intervals of not more than 6 months.

3.3.5 The Administration may allow ships operating on short international voyages not to launch the lifeboats on one side if their berthing arrangements in port and their trading patterns do not permit launching of lifeboats on that side. However, all such lifeboats shall be lowered at least once every 3 months and launched at least annually.

3.3.6 As far as is reasonable and practicable, rescue boats other than lifeboats which are also rescue boats, shall be launched each month with their assigned crew aboard and manoeuvred in the water. In all cases this requirement shall be complied with at least once every 3 months.

3.3.7 If lifeboat and rescue boat launching drills are carried out with the ship making headway, such drills shall, because of the dangers involved, be practised in sheltered waters only and under the supervision of an officer experienced in such drills.

3.3.8 If a ship is fitted with marine evacuation systems, drills shall include exercising of the procedures required for the deployment of such a system up to the point immediately preceding actual deployment of the system. This aspect of drills should be augmented by regular instruction using the on-board training aids required by regulation 35.4. Additionally every system party member shall, as far as practicable, be further trained by participation in a full deployment of a similar system into water, either on board a ship or ashore, at intervals of not longer than 2 years, but in no case longer than 3 years. This training can be associated with the deployments required by regulation 20.8.2.

3.3.9 Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.

#### **3.4 Fire drills**

3.4.1 Fire drills should be planned in such a way that due consideration is given to regular practice in the various emergencies that may occur depending on the type of ships and the cargo.

3.4.2 Each fire drill shall include:

- .1 reporting to stations and preparing for the duties described in the muster list required by regulation 8;
- .2 starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;
- .3 checking of fireman's outfit and other personal rescue equipment;
- .4 checking of relevant communication equipment;

- .5 checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
- .6 checking the necessary arrangements for subsequent abandoning of the ship.

3.4.3 The equipment used during drills shall immediately be brought back to its fully operational condition and any faults and defects discovered during the drills shall be remedied as soon as possible.

#### **4 On-board training and instructions**

4.1 On-board training in the use of the ship's life-saving appliances, including survival craft equipment, and in the use of the ship's fire-extinguishing appliances shall be given as soon as possible but not later than 2 weeks after a crew member joins the ship. However, if the crew member is on a regularly scheduled rotating assignment to the ship, such training shall be given not later than 2 weeks after the time of first joining the ship. Instructions in the use of the ship's fire-extinguishing appliances, life-saving appliances, and in survival at sea shall be given at the same interval as the drills. Individual instruction may cover different parts of the ship's life-saving and fire-extinguishing appliances, but all the ship's life-saving and fire-extinguishing appliances shall be covered within any period of 2 months.

4.2 Every crew member shall be given instructions which shall include but not necessarily be limited to:

- .1 operation and use of the ship's inflatable liferafts;
- .2 problems of hypothermia, first-aid treatment for hypothermia and other appropriate first-aid procedures;
- .3 special instructions necessary for use of the ship's life-saving appliances in severe weather and severe sea conditions; and
- .4 operation and use of fire-extinguishing appliances.

4.3 On-board training in the use of davit-launched liferafts shall take place at intervals of not more than 4 months on every ship fitted with such appliances. Whenever practicable this shall include the inflation and lowering of a liferaft. This liferaft may be a special liferaft intended for training purposes only, which is not part of the ship's life-saving equipment; such a special liferaft shall be conspicuously marked.

#### **5 Records**

The date when musters are held, details of abandon ship drills and fire drills, drills of other life-saving appliances and on board training shall be recorded in such log-book as may be prescribed by the Administration. If a full muster, drill or training session is not held at the appointed time, an entry shall be made in the log-book stating the circumstances and the extent of the muster, drill or training session held.

## Regulation 20

### Operational readiness, maintenance and inspections

1 This regulation applies to all ships. The requirements of paragraphs 3 and 6.2 shall be complied with, as far as is practicable, on ships constructed before 1 July 1986.

#### 2 Operational readiness

Before the ship leaves port and at all times during the voyage, all life-saving appliances shall be in working order and ready for immediate use.

#### 3 Maintenance

3.1 Instructions for on-board maintenance of life-saving appliances complying with the requirements of regulation 36 shall be provided and maintenance shall be carried out accordingly.

3.2 The Administration may accept, in lieu of the instructions required by paragraph 3.1, a shipboard planned maintenance programme which includes the requirements of regulation 36.

#### 4 Maintenance of falls

4.1 Falls used in launching shall be turned end for end at intervals of not more than 30 months and be renewed when necessary due to deterioration of the falls or at intervals of not more than 5 years, whichever is the earlier.

4.2 The Administration may accept in lieu of the "end for ending" required in paragraph 4.1, periodic inspection of the falls and their renewal whenever necessary due to deterioration or at intervals of not more than 4 years, whichever one is earlier.

#### 5 Spares and repair equipment

Spares and repair equipment shall be provided for life-saving appliances and their components which are subject to excessive wear or consumption and need to be replaced regularly.

#### 6 Weekly inspection

The following tests and inspections shall be carried out weekly:

- .1 all survival craft, rescue boats and launching appliances shall be visually inspected to ensure that they are ready for use;
- .2 all engines in lifeboats and rescue boats shall be run for a total period of not less than 3 min provided the ambient temperature is above the minimum temperature required for starting and running the engine. During this period of time, it should be demonstrated that the gear box and gear box train are engaging satisfactorily. If the special characteristics of an outboard motor fitted to a rescue boat would not allow it to be run other than with its propeller submerged for a period of 3 min, it should be run for such period as prescribed in the manufacturer's handbook. In special cases the Administration may waive this requirement for ships constructed before 1 July 1986; and
- .3 the general emergency alarm system shall be tested.

## 7 Monthly inspections

Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using the checklist required by regulation 36.1 to ensure that they are complete and in good order. A report of the inspection shall be entered in the log-book.

## 8 Servicing of inflatable liferafts, inflatable lifejackets, marine evacuation systems and inflated rescue boats

8.1 Every inflatable liferaft, inflatable lifejacket and marine evacuation system shall be serviced:

- .1 at intervals not exceeding 12 months, provided where in any case this is impracticable, the Administration may extend this period to 17 months; and
- .2 at an approved servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.

8.2 Rotational deployment of marine evacuation systems

In addition to, or in conjunction with, the servicing intervals of marine evacuation systems required by paragraph 8.1, each marine evacuation system should be deployed from the ship on a rotational basis at intervals to be agreed by the Administration provided that each system is to be deployed at least once every 6 years.

8.3 An Administration which approves new and novel inflatable liferaft arrangements pursuant to regulation 4 may allow for extended service intervals on the following conditions:

8.3.1 The new and novel liferaft arrangement has proved to maintain the same standard, as required by testing procedure, during extended service intervals.

8.3.2 The liferaft system shall be checked on board by certified personnel according to paragraph 8.1.1.

8.3.3 Service at intervals not exceeding 5 years shall be carried out in accordance with the recommendations of the Organization.

8.4 All repairs and maintenance of inflated rescue boats shall be carried out in accordance with the manufacturer's instructions. Emergency repairs may be carried out on board the ship; however, permanent repairs shall be effected at an approved servicing station.

8.5 An Administration which permits extension of liferaft service intervals in accordance with paragraph 8.3 shall notify the Organization of such action in accordance with regulation 1/5(b).

## 9 Periodic servicing of hydrostatic release units

Hydrostatic release units, other than disposable hydrostatic release units, shall be serviced:

- .1 at intervals not exceeding 12 months, provided where in any case this is impracticable, the Administration may extend this period to 17 months; and

- .2 at a servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.

#### 10 Marking of stowage locations

Containers, brackets, racks, and other similar stowage locations for life-saving equipment shall be marked with symbols in accordance with the recommendations of the Organization, indicating the devices stowed in that location for that purpose. If more than one device is stowed in that location, the number of devices shall also be indicated.

#### 11 Periodic servicing of launching appliances and on-load release gear

##### 11.1 Launching appliances:

- .1 shall be serviced at recommended intervals in accordance with instructions for on-board maintenance as required by regulation 36;
- .2 shall be subjected to a thorough examination at intervals not exceeding 5 years; and
- .3 shall upon completion of the examination in .2 be subjected to a dynamic test of the winch brake in accordance with paragraph 6.1.2.5.2 of the Code.

##### 11.2 Lifeboat on-load release gear shall be:

- .1 serviced at recommended intervals in accordance with instructions for on-board maintenance as required by regulation 36;
- .2 subjected to a thorough examination and test during the surveys required by regulation I/7 and I/8 by properly trained personnel familiar with the system; and
- .3 operationally tested under a load of 1.1 times the total mass of the lifeboat when loaded with its full complement of persons and equipment whenever the release gear is overhauled. Such overhauling and test shall be carried out at least once every 5 years.

## SECTION II - PASSENGER SHIPS (ADDITIONAL REQUIREMENTS)

### Regulation 21

#### Survival craft and rescue boats

##### 1 Survival craft

1.1 Passenger ships engaged on international voyages which are not short international voyages shall carry:

- .1 partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code on each side of such aggregate capacity as will accommodate not less than 50% of the total number of persons on board. The Administration may permit the substitution of lifeboats by liferafts of equivalent total capacity provided that there shall never be less than sufficient lifeboats on

each side of the ship to accommodate 37.5% of the total number of persons on board. The inflatable or rigid liferafts shall comply with the requirements of section 4.2 or 4.3 of the Code and shall be served by launching appliances equally distributed on each side of the ship; and

- .2 in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of paragraph 1.1.1 or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of regulation 13.5.

1.2 Passenger ships engaged on short international voyages and complying with the special standards of subdivision prescribed by regulation II-1/6.5 shall carry:

- .1 partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code of such aggregate capacity as will accommodate at least 30% of the total number of persons on board. The lifeboats shall, as far as practicable, be equally distributed on each side of the ship. In addition inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code shall be carried of such aggregate capacity that, together with the lifeboat capacity, the survival craft will accommodate the total number of persons on board. The liferafts shall be served by launching appliances equally distributed on each side of the ship; and
- .2 in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of paragraph 1.2.1 or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of regulation 13.5.

1.3 Passenger ships engaged on short international voyages and not complying with the special standards of subdivision prescribed by regulation II-1/6.5, shall carry survival craft complying with the requirements of paragraph 1.1.

1.4 All survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 30 min from the time the abandon ship signal is given.

1.5 In lieu of meeting the requirements of paragraph 1.1, 1.2 or 1.3, passenger ships of less than 500 gross tonnage where the total number of persons on board is less than 200, may comply with the following:

- .1 they shall carry on each side of the ship, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board.
- .2 unless the liferafts required by paragraph 1.5.1 are stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall



be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;

- .3 if the rescue boat required by paragraph 2.2 is also a partially or totally enclosed lifeboat complying with the requirements of section 4.5 or 4.6 of the Code, it may be included in the aggregate capacity required by paragraph 1.5.1, provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board.; and
- .4 in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including those which are stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.

1.6 A marine evacuation system or systems complying with section 6.2 of the Code may be substituted for the equivalent capacity of liferafts and launching appliances required by paragraph 1.1.1 or 1.2.1.

## **2 Rescue boats**

2.1 Passenger ships of 500 gross tonnage and over shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code on each side of the ship.

2.2 Passenger ships of less than 500 gross tonnage shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code.

2.3 A lifeboat may be accepted as a rescue boat provided it also complies with the requirements for a rescue boat.

## **3 Marshalling of liferafts**

3.1 The number of lifeboats and rescue boats that are carried on passenger ships shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than six liferafts need be marshalled by each lifeboat or rescue boat.

3.2 The number of lifeboats and rescue boats that are carried on passenger ships engaged on short international voyages and complying with the special standards of subdivision prescribed by regulation II-1/6.5 shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than nine liferafts need be marshalled by each lifeboat or rescue boat.

# **Regulation 22**

## **Personal life-saving appliances**

### **1 Lifebuoys**

1.1 A passenger ship shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 and section 2.1 of the Code prescribed in the following table:

Length of ship in metres	Minimum number of lifebuoys
Under 60	8
60 and under 120	12
120 and under 180	18
180 and under 240	24
240 and over	30

1.2 Notwithstanding regulation 7.1.3, passenger ships of under 60 m in length shall carry not less than six lifebuoys provided with self-igniting lights.

## 2 Lifejackets

2.1 In addition to the lifejackets required by regulation 7.2, every passenger ship shall carry lifejackets for not less than 5% of the total number of persons on board. These lifejackets shall be stowed in conspicuous places on deck or at muster stations.

2.2 Where lifejackets for passengers are stowed in staterooms which are located remotely from direct routes between public spaces and muster stations, the additional lifejackets for these passengers required under regulation 7.2.2, shall be stowed either in the public spaces, the muster stations, or on direct routes between them. The lifejackets shall be stowed so that their distribution and donning does not impede orderly movement to muster stations and survival craft embarkation stations.

## 3 Lifejacket lights

3.1 On all passenger ships each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.

3.2 Lights fitted on lifejackets on board passenger ships prior to 1 July 1998 and not complying fully with paragraph 2.2.3 of the Code may be accepted by the Administration until the lifejacket light would normally be replaced or until the first periodical survey after 1 July 2002, whichever is the earliest.

## 4 Immersion suits and thermal protective aids

4.1 All passenger ships shall carry for each lifeboat on the ship at least three immersion suits complying with the requirements of section 2.3 of the Code and, in addition, a thermal protective aid complying with the requirements of section 2.5 of the Code for every person to be accommodated in the lifeboat and not provided with an immersion suit. These immersion suits and thermal protective aids need not be carried:

- .1 for persons to be accommodated in totally or partially enclosed lifeboats; or
- .2 if the ship is constantly engaged on voyages in warm climates where, in the opinion of the Administration, they are unnecessary.

4.2 The provisions of paragraph 4.1.1 also apply to partially or totally enclosed lifeboats not complying with the requirements of section 4.5 or 4.6 of the Code, provided they are carried on ships constructed before 1 July 1986.

### **Regulation 23**

#### **Survival craft and rescue boat embarkation arrangements**

- 1 On passenger ships, survival craft embarkation arrangements shall be designed for:
  - .1 all lifeboats to be boarded and launched either directly from the stowed position or from an embarkation deck but not both; and
  - .2 davit-launched liferafts to be boarded and launched from a position immediately adjacent to the stowed position or from a position to which, in compliance with the requirements of regulation 13.5, the liferaft is transferred prior to launching.
- 2 Rescue boat arrangements shall be such that the rescue boat can be boarded and launched directly from the stowed position with the number of persons assigned to crew the rescue boat on board. Notwithstanding the requirements of paragraph 1.1, if the rescue boat is also a lifeboat and the other lifeboats are boarded and launched from an embarkation deck, the arrangements shall be such that the rescue boat can also be boarded and launched from the embarkation deck.

### **Regulation 24**

#### **Stowage of survival craft**

The stowage height of a survival craft on a passenger ship shall take into account the requirements of regulation 13.1.2, the escape provisions of regulation II-2/28, the size of the ship, and the weather conditions likely to be encountered in its intended area of operation. For a davit-launched survival craft, the height of the davit head with the survival craft in embarkation position, shall, as far as practicable, not exceed 15 m to the waterline when the ship is in its lightest seagoing condition.

### **Regulation 25**

#### **Muster stations**

Every passenger ship shall, in addition to complying with the requirements of regulation 11, have passenger muster stations which shall:

- .1 be in the vicinity of, and permit ready access for the passengers to, the embarkation stations unless in the same location; and
- .2 have ample room for marshalling and instruction of the passengers, but at least 0.35 m<sup>2</sup> per passenger.

## Regulation 26

### Additional requirements for ro-ro passenger ships

- 1 This regulation applies to all ro-ro passenger ships. Ro-ro passenger ships constructed:
  - .1 on or after 1 July 1998 shall comply with the requirements of paragraphs 2.3, 2.4, 3.1, 3.2, 3.3, 4 and 5;
  - .2 on or after 1 July 1986 and before 1 July 1998 shall comply with the requirements of paragraph 5 not later than the first periodical survey after 1 July 1998 and with the requirements of paragraphs 2.3, 2.4, 3 and 4 not later than the first periodical survey after 1 July 2000; and
  - .3 before 1 July 1986 shall comply with the requirements of paragraph 5 not later than the first periodical survey after 1 July 1998 and with the requirements of paragraphs 2.1, 2.2, 2.3, 2.4, 3 and 4 not later than the first periodical survey after 1 July 2000.

### 2 Liferrafts

- 2.1 The ro-ro passenger ship's liferafts shall be served by marine evacuation systems complying with the requirements of section 6.2 of the Code or launching appliances complying with the requirements of paragraph 6.1.5 of the Code, equally distributed on each side of the ship.
- 2.2 Every liferaft on ro-ro passenger ships shall be provided with float-free stowage arrangements complying with the requirements of regulation 13.4.
- 2.3 Every liferaft on ro-ro passenger ships shall be of a type fitted with a boarding ramp complying with the requirements of paragraph 4.2.4.1 or 4.3.4.1 of the Code, as appropriate.
- 2.4 Every liferaft on ro-ro passenger ships shall either be automatically self-righting or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, the ship shall carry automatically self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50% of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats. Every such liferaft shall be approved by the Administration having regard to the recommendations adopted by the Organization.

### 3 Fast rescue boats

- 3.1 At least one of the rescue boats on a ro-ro passenger ship shall be a fast rescue boat approved by the Administration having regard to the recommendations adopted by the Organization.
- 3.2 Each fast rescue boat shall be served by a suitable launching appliance approved by the Administration. When approving such launching appliances, the Administration shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather conditions, and also shall have regard to the recommendations adopted by the Organization.

3.3 At least two crews of each fast rescue boat shall be trained and drilled regularly having regard to the Seafarers Training, Certification and Watchkeeping (STCW) Code and recommendations adopted by the Organization, including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsizing.

3.4 In the case where the arrangement or size of a ro-ro passenger ship, constructed before 1 July 1997, is such as to prevent the installation of the fast rescue boat required by paragraph 3.1, the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a rescue boat or, in the case of ships constructed prior to 1 July 1986, boats for use in an emergency, provided that all of the following conditions are met:

- .1 the fast rescue boat installed is served by a launching appliance complying with the provisions of paragraph 3.2;
- .2 the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced; and
- .3 such liferafts are served by the existing launching appliances or marine evacuation systems

#### **4 Means of rescue**

4.1 Each ro-ro passenger ship shall be equipped with efficient means for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship.

4.2 The means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes.

4.3 If the slide of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the slide shall be equipped with handlines or ladders to aid in climbing up the slide.

#### **5 Lifejackets**

5.1 Notwithstanding the requirements of regulations 7.2 and 22.2, a sufficient number of lifejackets shall be stowed in the vicinity of the muster stations so that passengers do not have to return to their cabins to collect their lifejackets.

5.2 In ro-ro passenger ships, each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.

### **Regulation 27**

#### **Information on passengers**

1 All persons on board all passenger ships shall be counted prior to departure.

2 Details of persons who have declared a need for special care or assistance in emergency situations shall be recorded and communicated to the master prior to departure.

3 In addition, not later than 1 January 1999, the names and gender of all persons on board, distinguishing between adults, children and infants shall be recorded for search and rescue purposes.

4 The information required by paragraphs 1, 2 and 3 shall be kept ashore and made readily available to search and rescue services when needed.

5 Administrations may exempt passenger ships from the requirements of paragraph 3, if the scheduled voyages of such ships render it impracticable for them to prepare such records.

#### **Regulation 28**

##### **Helicopter landing and pick-up areas**

1 All ro-ro passenger ships, shall be provided with a helicopter pick-up area approved by the Administration having regard to the recommendations adopted by the Organization.

2 Passenger ships of 130 m in length and upwards, constructed on or after 1 July 1999, shall be fitted with a helicopter landing area approved by the Administration having regard to the recommendations adopted by the Organization.

#### **Regulation 29**

##### **Decision support system for masters of passenger ships**

1 This regulation applies to all passenger ships. Passenger ships constructed before 1 July 1997 shall comply with the requirements of this regulation not later than the date of the first periodical survey after 1 July 1999.

2 In all passenger ships, a decision support system for emergency management shall be provided on the navigation bridge.

3 The system shall, as a minimum, consist of a printed emergency plan or plans. All foreseeable emergency situations shall be identified in the emergency plan or plans, including, but not limited to, the following main groups of emergencies:

- .1 fire;
- .2 damage to ship;
- .3 pollution;
- .4 unlawful acts threatening the safety of the ship and the security of its passengers and crew;
- .5 personnel accidents;
- .6 cargo-related accidents; and
- .7 emergency assistance to other ships.

4 The emergency procedures established in the emergency plan or plans shall provide decision support to masters for handling any combination of emergency situations.

5 The emergency plan or plans shall have a uniform structure and be easy to use. Where applicable, the actual loading condition as calculated for the passenger ship's voyage stability shall be used for damage control purposes.

6 In addition to the printed emergency plan or plans, the Administration may also accept the use of a computer-based decision-support system on the navigation bridge which provides all the information contained in the emergency plan or plans, procedures, checklists, etc., which is able to present a list of recommended actions to be carried out in foreseeable emergencies.

### **Regulation 30**

#### **Drills**

1 This regulation applies to all passenger ships.

2 On passenger ships, an abandon ship drill and fire drill shall take place weekly. The entire crew need not be involved in every drill, but each crew member must participate in an abandon ship drill and a fire drill each month as required in regulation 19.3.2. Passengers shall be strongly encouraged to attend these drills.

## **SECTION III - CARGO SHIPS (ADDITIONAL REQUIREMENTS)**

### **Regulation 31**

#### **Survival craft and rescue boats**

#### **1 Survival craft**

1.1 Cargo ships shall carry:

- .1 one or more totally enclosed lifeboats complying with the requirements of section 4.6 of the Code of such aggregate capacity on each side of the ship as will accommodate the total number of persons on board; and
- .2 in addition, one or more inflatable or rigid liferafts, complying with the requirements of section 4.2 or 4.3 of the Code, stowed in a position providing for easy side-to-side transfer at a single open deck level, and of such aggregate capacity as will accommodate the total number of persons on board. If the liferaft or liferafts are not stowed in a position providing for easy side-to-side transfer at a single open deck level, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.

1.2 In lieu of meeting the requirements of paragraph 1.1, cargo ships may carry:

- .1 one or more free-fall lifeboats, complying with the requirements of section 4.7 of the Code, capable of being free-fall launched over the stern of the ship of such aggregate capacity as will accommodate the total number of persons on board; and

- .2 in addition, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code, on each side of the ship, of such aggregate capacity as will accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.

1.3 In lieu of meeting the requirements of paragraph 1.1 or 1.2, cargo ships of less than 85 m in length other than oil tankers, chemical tankers and gas carriers, may comply with the following:

- .1 they shall carry on each side of the ship, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;
- .2 unless the liferafts required by paragraph 1.3.1 are stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;
- .3 if the rescue boat required by paragraph 2 is also a totally enclosed lifeboat complying with the requirements of section 4.6 of the Code, it may be included in the aggregate capacity required by paragraph 1.3.1, provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board; and
- 4 in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including any which are stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.

1.4 Cargo ships where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m shall carry, in addition to the liferafts required by paragraphs 1.1.2 and 1.2.2, a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable. Such liferaft or liferafts may be securely fastened so as to permit manual release and need not be of the type which can be launched from an approved launching device.

1.5 With the exception of the survival craft referred to in regulation 16.1.1, all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 10 min from the time the abandon ship signal is given.

1.6 Chemical tankers and gas carriers carrying cargoes emitting toxic vapours or gases shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, lifeboats with a self-contained air support system complying with the requirements of section 4.8 of the Code.

1.7 Oil tankers, chemical tankers and gas carriers carrying cargoes having a flashpoint not exceeding 60°C (closed cup test) shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, fire-protected lifeboats complying with the requirements of section 4.9 of the Code.



## 2 Rescue boats

Cargo ships shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code. A lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat.

3 In addition to their lifeboats, all cargo ships constructed before 1 July 1986 shall carry:

- .1 one or more liferafts capable of being launched on either side of the ship and of such aggregate capacity as will accommodate the total number of persons on board. The liferaft or liferafts shall be equipped with a lashing or an equivalent means of securing the liferaft which will automatically release it from a sinking ship; and
- .2 where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m, in addition to the liferafts required by paragraph 3.1, a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable. Notwithstanding the requirements of paragraph 3.1, such liferaft or liferafts may be securely fastened so as to permit manual release.

### Regulation 32

#### Personal life-saving appliances

##### 1 Lifebuoys

1.1 Cargo ships shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 and section 2.1 of the Code prescribed in the following table:

Length of ship in metres	Minimum number of lifebuoys
Under 100	8
100 and under 150	10
150 and under 200	12
200 and over	14

1.2 Self-igniting lights for lifebuoys on tankers required by regulation 7.1.3 shall be of an electric battery type.

##### 2 Lifejacket lights

2.1 This paragraph applies to all cargo ships.

2.2 On cargo ships, each lifejacket shall be fitted with a lifejacket light complying with the requirements of paragraph 2.2.3 of the Code.

2.3 Lights fitted on lifejackets on board cargo ships prior to 1 July 1998 and not complying fully with paragraph 2.2.3 of the Code may be accepted by the Administration until the lifejacket light would normally be replaced or until the first periodical survey after 1 July 2001, whichever is the earliest.

### 3 Immersion suits and thermal protective aids

3.1 This paragraph applies to all cargo ships.

3.2 Cargo ships shall carry for each lifeboat on the ship at least three immersion suits complying with the requirements of section 2.3 of the Code or, if the Administration considers it necessary and practicable, one immersion suit complying with the requirements of section 2.3 of the Code for every person on board the ship; however, the ship shall carry in addition to the thermal protective aids required by paragraphs 4.1.5.1.24, 4.4.8.31 and 5.1.2.2.13 of the Code, thermal protective aids complying with the requirements of section 2.5 of the Code for persons on board not provided with immersion suits. These immersion suits and thermal protective aids need not be required if the ship:

- .1 has totally enclosed lifeboats on each side of the ship of such aggregate capacity as will accommodate the total number of persons on board; or
- .2 has totally enclosed lifeboats capable of being launched by free fall over the stern of the ship of such aggregate capacity as will accommodate the total number of persons on board and which are boarded and launched directly from the stowed position, together with liferafts on each side of the ship of such aggregate capacity as will accommodate the total number of persons on board; or
- .3 is constantly engaged on voyages in warm climates where, in the opinion of the Administration, immersion suits are unnecessary.

3.3 Cargo ships complying with the requirements of regulation 31.1.3 shall carry immersion suits complying with the requirements of section 2.3 of the Code for every person on board unless the ship:

- .1 has davit-launched liferafts; or
- .2 has liferafts served by equivalent approved appliances capable of being used on both sides of the ship and which do not require entry into the water to board the liferaft, or
- .3 is constantly engaged on voyages in warm climates where, in the opinion of the Administration, immersion suits are unnecessary.

3.4 The immersion suits required by this regulation may be used to comply with the requirements of regulation 7.3.

3.5 The totally enclosed lifeboats referred to in paragraphs 3.2.1 and 3.2.2 carried on cargo ships constructed before 1 July 1986 need not comply with the requirements of section 4.6 of the Code.

**Regulation 33****Survival craft embarkation and launching arrangements**

1 Cargo ship survival craft embarkation arrangements shall be so designed that lifeboats can be boarded and launched directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of regulation 13.5.

2 On cargo ships of 20,000 gross tonnage and upwards, lifeboats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.

**SECTION IV - LIFE-SAVING APPLIANCES AND ARRANGEMENTS  
REQUIREMENTS****Regulation 34**

All life-saving appliances and arrangements shall comply with the applicable requirements of the Code.

**SECTION V - MISCELLANEOUS****Regulation 35****Training manual and on-board training aids**

1 This regulation applies to all ships.

2 A training manual complying with the requirements of paragraph 3 shall be provided in each crew mess room and recreation room or in each crew cabin.

3 The training manual, which may comprise several volumes, shall contain instructions and information, in easily understood terms illustrated wherever possible, on the life-saving appliances provided in the ship and on the best methods of survival. Any part of such information may be provided in the form of audio-visual aids in lieu of the manual. The following shall be explained in detail:

- .1 donning of lifejackets, immersion suits and anti-exposure suits, as appropriate;
- .2 muster at the assigned stations;
- .3 boarding, launching, and clearing the survival craft and rescue boats, including, where applicable, use of marine evacuation systems;
- .4 method of launching from within the survival craft;
- .5 release from launching appliances;
- .6 methods and use of devices for protection in launching areas, where appropriate;

- .7 illumination in launching areas;
- .8 use of all survival equipment;
- .9 use of all detection equipment;
- .10 with the assistance of illustrations, the use of radio life-saving appliances;
- .11 use of drogues;
- .12 use of engine and accessories;
- .13 recovery of survival craft and rescue boats including stowage and securing;
- .14 hazards of exposure and the need for warm clothing;
- .15 best use of the survival craft facilities in order to survive,
- .16 methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), breeches-buoy and shore life-saving apparatus and ship's line-throwing apparatus;
- .17 all other functions contained in the muster list and emergency instructions; and
- .18 instructions for emergency repair of the life-saving appliances.

4 Every ship fitted with a marine evacuation system shall be provided with on-board training aids in the use of the system.

#### **Regulation 36**

##### **Instructions for on-board maintenance**

Instructions for on-board maintenance of life-saving appliances shall be easily understood, illustrated wherever possible, and, as appropriate, shall include the following for each appliance:

- .1 a checklist for use when carrying out the inspections required by regulation 20.7;
- .2 maintenance and repair instructions;
- .3 schedule of periodic maintenance;
- .4 diagram of lubrication points with the recommended lubricants;
- .5 list of replaceable parts;
- .6 list of sources of spare parts; and
- .7 log for records of inspections and maintenance.

**Regulation 37****Muster list and emergency instructions**

1 The muster list shall specify details of the general emergency alarm and public address system prescribed by section 7.2 of the Code and also action to be taken by crew and passengers when this alarm is sounded. The muster list shall also specify how the order to abandon ship will be given.

2 Each passenger ship shall have procedures in place for locating and rescuing passengers trapped in their staterooms.

3 The muster list shall show the duties assigned to the different members of the crew including:

- .1 closing of the watertight doors, fire doors, valves, scuppers, sidescuttles, skylights, portholes and other similar openings in the ship;
- .2 equipping of the survival craft and other life-saving appliances;
- .3 preparation and launching of survival craft;
- .4 general preparations of other life-saving appliances;
- .5 muster of passengers;
- .6 use of communication equipment;
- .7 manning of fire parties assigned to deal with fires; and
- .8 special duties assigned in respect to the use of fire-fighting equipment and installations.

4 The muster list shall specify which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use.

5 The muster list shall specify substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions.

6 The muster list shall show the duties assigned to members of the crew in relation to passengers in case of emergency. These duties shall include:

- .1 warning the passengers;
- .2 seeing that they are suitably clad and have donned their lifejackets correctly;
- .3 assembling passengers at muster stations;
- .4 keeping order in the passageways and on the stairways and generally controlling the movements of the passengers; and
- .5 ensuring that a supply of blankets is taken to the survival craft.

7 The muster list shall be prepared before the ship proceeds to sea. After the muster list has been prepared, if any change takes place in the crew which necessitates an alteration in the muster list, the master shall either revise the list or prepare a new list.

8 The format of the muster list used on passenger ships shall be approved.

## CHAPTER VI

### CARRIAGE OF CARGOES

#### Regulation 2 - Cargo information

9 Existing subparagraph 2 of paragraph 2 is replaced by the following:

".2 in the case of bulk cargo, information on the stowage factor of the cargo, the trimming procedures, likelihood of shifting including angle of repose, if applicable, and any other relevant special properties. In the case of a concentrate or other cargo which may liquefy, additional information in the form of a certificate on the moisture content of the cargo and its transportable moisture limit."

#### Regulation 7 - Stowage of bulk cargo

10 The existing text of regulation 7 is replaced by the following:

##### "Regulation 7 Loading, unloading and stowage of bulk cargoes

1 For the purpose of this regulation, *terminal representative* means a person appointed by the terminal or other facility, where the ship is loading or unloading, who has responsibility for operations conducted by that terminal or facility with regard to the particular ship.

2 To enable the master to prevent excessive stresses in the ship's structure, the ship shall be provided with a booklet, which shall be written in a language with which the ship's officers responsible for cargo operations are familiar. If this language is not English, the ship shall be provided with a booklet written also in the English language. The booklet shall, as a minimum, include:

- .1 stability data, as required by regulation II-1/22 ;
- .2 ballasting and deballasting rates and capacities;
- .3 maximum allowable load per unit surface area of the tank top plating;
- .4 maximum allowable load per hold;
- .5 general loading and unloading instructions with regard to the strength of the ship's structure including any limitations on the most adverse operating conditions during loading, unloading, ballasting operations and the voyage;
- .6 any special restrictions such as limitations on the most adverse operating conditions imposed by the Administration or organization recognised by it, if applicable; and

- .7 where strength calculations are required, maximum permissible forces and moments on the ship's hull during loading, unloading and the voyage.

3 Before a solid bulk cargo is loaded or unloaded, the master and the terminal representative shall agree on a plan which shall ensure that the permissible forces and moments on the ship are not exceeded during loading or unloading, and shall include the sequence, quantity and rate of loading or unloading, taking into consideration the speed of loading or unloading, the number of pours and the deballasting or ballasting capability of the ship. The plan and any subsequent amendments thereto shall be lodged with the appropriate authority of the port State.

4 Bulk cargoes shall be loaded and trimmed reasonably level, as necessary, to the boundaries of the cargo space so as to minimize the risk of shifting and to ensure that adequate stability will be maintained throughout the voyage.

5 When bulk cargoes are carried in 'tween-decks, the hatchways of such 'tween-decks shall be closed in those cases where the loading information indicates an unacceptable level of stress of the bottom structure if the hatchways are left open. The cargo shall be trimmed reasonably level and shall either extend from side to side or be secured by additional longitudinal divisions of sufficient strength. The safe load-carrying capacity of the 'tween-decks shall be observed to ensure that the deck-structure is not overloaded.

6 The master and terminal representative shall ensure that loading and unloading operations are conducted in accordance with the agreed plan.

7 If during loading or unloading any of the limits of the ship referred to in paragraph 2 are exceeded or are likely to become so if the loading or unloading continues, the master has the right to suspend operation and the obligation to notify accordingly the appropriate authority of the port State with which the plan has been lodged. The master and the terminal representative shall ensure that corrective action is taken. When unloading cargo, the master and terminal representative shall ensure that the unloading method does not damage the ship's structure.

8 The master shall ensure that ship's personnel continuously monitor cargo operations. Where possible, the ship's draught shall be checked regularly during loading or unloading to confirm the tonnage figures supplied. Each draught and tonnage observation shall be recorded in a cargo log-book. If significant deviations from the agreed plan are detected, cargo or ballast operations or both shall be adjusted to ensure that the deviations are corrected."

## CHAPTER XI

### SPECIAL MEASURES TO ENHANCE MARITIME SAFETY

#### Regulation 1 - Authorization of recognized organizations

- 11 The existing text of the regulation is replaced by the following:

"Organizations referred to in regulation I/6 shall comply with the Guidelines adopted by the Organization by resolution A.739(18), as may be amended by the Organization and the Specifications adopted by the Organization by resolution A.789(19), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the Annex other than chapter I."