第 46 期

第 二 組

澳門特別行政區公報
由第一組及第二組組成

二零一四年十一月十四日，星期五

Número 46

II

SÉRIE

do *Boletim Oficial* da Região Administrativa Especial de Macau, constituído pelas séries I e II

Sexta-feira, 14 de Novembro de 2014

澳門特別行政區公報
BOLETIM OFICIAL DA REGIÃO ADMINISTRATIVA ESPECIAL DE MACAU

副 刊
SUPLEMENTO

目 錄

澳門特別行政區

行政長官辦公室：

SUMÁRIO

REGIÃO ADMINISTRATIVA ESPECIAL DE MACAU

Gabinete do Chefe do Executivo:

印務局，澳門官印局街。電話：2857 3822 • 傳真：2859 6802 • 電子郵件：info@io.gov.mo

Imprensa Oficial, Rua da Imprensa Nacional — Macau. *Tel.:* 2857 3822 • *Fax:* 2859 6802 • *E-mail:* info@io.gov.mo
網址*Website*: http://www.io.gov.mo

澳門特別行政區

行 政 長 官 辦 公 室

第 78/2014 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一九八九年四月十一日透過第MSC.13（57）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第MSC.13（57）號決議的中文及英文正式文本。

二零一四年十月三十日發佈。

行政長官　崔世安

REGIÃO ADMINISTRATIVA ESPECIAL DE MACAU

GABINETE DO CHEFE DO EXECUTIVO

Aviso do Chefe do Executivo n.º 78/2014

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 11 de Abril de 1989, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.13(57), 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.13(57), que contém as referidas emendas, nos seus textos autênticos em línguas chinesa e inglesa.

Promulgado em 30 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

海安會第 MSC.13（57）號決議

（1989 年 4 月 11 日通過）

通過《1974 年國際海上人命安全公約》的修正案

海上安全委員會，

注意到《國際海事組織公約》關於本委員會職能的第 28（b）條，

進而注意到《1974 年國際海上人命安全公約》（以下簡稱《公約》）關於修正公約附則（除第 I 章外）的程序的第 VIII（b）條，

在其第五十七屆會議上審議了根據《公約》第 VIII（b）（i）條建議並散發的《公約》修正案，

1. 根據《公約》第 VIII（b）（iv）條，通過本《公約》修正案，其文本載於本決議的附件中；

2. 根據《公約》第 VIII（b）（vi）（2）（bb）條，確定，在 1991 年 7 月 31 日之前，如無三分之一以上的締約國政府或商船合計噸數不少於世界商船總噸數百分之五十的締約國表示反對，則該修正案應視為在該日期已被接受；

3. 提請締約國注意，根據《公約》第 VIII（b）（vii）（2）條，該修正案一經按上文第 2 段得到接受，即應於 1992 年 2 月 1 日生效；

4. 要求秘書長按照《公約》第 VIII（b）（v）條，將本決議及其附件中的修正案文本的核正無誤的副本發送給所有《1974 年國際海上人命安全公約》締約國政府；

5. 並要求秘書長將本決議的副本發送給本組織成員國中的非《公約》締約國政府。

附件

經修正的《1974 年國際海上人命安全公約》的修正案

第 II-1 章

構造-分艙和穩性、機電設備

第 11 條

原標題改為：

“貨船尖艙和機器處所的艙壁及尾軸管”。

將下列文字加在標題後面：

“（本條第 8 和 9 段適用於 1992 年 2 月 1 日及其後建造的船舶）”。

將下列新的第 8 和 9 段加在第 7 段後面：

“8. 應設置艙壁將機器處所與其前、後部的載貨和載客處所分開，且直至乾舷甲板形成水密。

9. 尾軸管應圍蔽在具有適度體積的一個（或多個）水密處所內，主管機關可自行決定是否要求採取儘量減少尾軸管裝置破損時船舶浸水危險的其他措施。”

第 12 條

客船雙層底

將第 5 段第 3 行的“規則第 III／2 條”改為“規則第 III／3.16 條”。

第 12-1 條

將下列新的第 II-1／12-1 條加在第 12 條後面：

"非液貨船雙層底"

（本條適用於 1992 年 2 月 1 日及其後建造的船舶）

1 在對船舶的設計及正常作業適當可行的情況下，應儘量自防撞艙壁延伸至尾尖艙壁設置雙層底。

2 凡須設置雙層底時，其高度應經主管機關同意，其內底應延伸至船舷，以保護船底至舭部彎曲處。

3 設於雙層底內的貨艙污水阱，不應向下延伸至超過所需的深度。但准許船舶軸隧後端的阱延伸至外底。其他的阱，如其佈置能與符合本條規定的雙層底具有同等保護作用，則主管機關可與同意設置。

4 專供裝載液體的水密分艙內，如主管機關認為該艙的船底破損不致損害船舶安全時，可不設雙層底"。

第 15 條

本條的原文改為：

"客船水密艙壁上的開口

（本條適用於 1992 年 2 月 1 日及其後建造的船舶）

1 水密艙壁開口的數量應在適應船舶設計及正常作業的情況下減至最少，這些開口均應備有可靠的關閉設備。

2.1 凡管子、排水管和電纜等通過水密分艙艙壁時，應設有保證該艙壁水密完整性的裝置。

2.2 不構成管系組成部分的閥不得設在水密分艙艙壁上。

2.3 鉛和其他易溶材料，不得用於穿過水密分艙艙壁的裝置，因為發生火災時這種裝置的損壞將會損害艙壁的水密完整性。

3.1 門、人孔或出入口不得設於：

.1 限界線以下的防撞艙壁；

.2 分隔相鄰貨艙或貨艙與固定式或備用煤艙的水密橫艙壁，但第 10.1 段和第 16 條所規定者除外。

3.2 除第 3.3 段所規定者外，在限界線以下的防撞艙上僅可通過一根管子，以處理首尖艙內的液體，但該管子應裝有能在艙壁甲板上操作的截止閥，其閥體應於首尖艙內裝設防撞艙壁上。但若在各種航行狀態下隨時可以到達閥的位置，且閥設在非貨艙內，主管機關可以授權在防撞艙壁後面裝設這種閥。

3.3 如首尖艙經分隔裝載兩種不同的液體，而主管機關認為除裝設第二根管子外無其他切實可行的替代辦法，且已考慮在首尖艙內增加分艙以保持船舶安全，則主管機關可允許在限界線以下的防撞艙壁上穿過兩根管子，每把管子均應按上述 3.2 的要求裝設。

4.1 裝於固定和備用煤艙之間艙壁上的水密門，應是隨時可以到達的。但第 9.4 段所規定的甲板間煤艙門除外。

4.2 應適當佈置隔板或採取其他措施，以防煤炭妨礙煤艙水密門的關閉。

5 在滿足本條第 11 段的條件下，在主、輔推進機械，包括推進所需的鍋爐及一切固定煤艙的處所內，其每一主橫艙壁上，除通往煤艙及軸隧的門外，只准設置一扇門。如裝有兩根或更多的軸，各軸隧之間應以互通的通道連接。當裝有兩根軸時，在機器處所與軸隧間只准設一扇門；當裝設的軸為兩根以上時，則只准設兩扇門。所有這類門均應為滑動式，且其門檻應儘可能高。由艙壁甲板上方操縱這些門的手動裝置，應設於機器處所以外。

6.1 除第 10.1 段及第 16 條規定者外，水密門均應是符合第 7 段要求的動力式滑動門，當船舶正浮時，應能從駕駛室內的集中控制台以不超過 60 秒的時間同時關閉。

6.2 任何動力式滑動水密門，在船舶向任何一舷橫傾 15°時，均應能以動力或手動方式關閉。還應考慮當水通過開口，施加一個相當於門檻中點以上至少一米水柱的靜壓頭時，可能作用於該門任何一側的各種力。

6.3 水密門的控制裝置，包括液壓管和電纜，應儘可能接近安裝該門的艙壁，以儘量減少因船舶破損而殃及它們的可能性。當船舶破損範圍在第 2 條定義的船寬的五分之一（在最深分艙載重線平面上垂直船體中心線量計）時，水密門及其控制裝置的位置應不會妨礙對船舶無破損部分的水密門進行操作。

6.4 所有動力式滑動水密門均應設有指示裝置，它應在所有遙控位置顯示這些門的啟閉狀態。遙控位置只應設在第 7.1.5 段所要求的駕駛台和第 7.1.4 段所要求的在艙壁甲板上進行手動操作的地方。

7.1 每一動力式滑動水密門：

.1 應能垂向或水平移動；

.2 除滿足第 11 段的規定外，開口最大淨寬度一般應限制在 1.2 米。但若考慮了包括下列內容的其他安全措施，主管機關可以允許只增大到它認為對船舶有效作業所必需的程度：

.1 為防止泄漏，應特別考慮門及其關閉裝置的強度，

.2 該門應裝在 B／5 破損區之外，

.3 當船舶出海時，該門應保持關閉，主管機關認為絕對必要時開啟一段有限時間除外；

.3 應安裝採用電力、液壓或主管機關可以接受的任何其他形式的動力啟閉該門的必要裝置；

.4 應裝有單獨的手動裝置。應能在門的任何一側以手動方式將門開啟或關閉，此外，還應能夠從艙壁甲板以上易於到達的位置用全周手柄動作或主管機關可以接受並能達到同樣安全程度的其他動作關閉該門。在所有的操作位置，均應清晰地標明旋轉或其他動作的方向。當船舶正浮時，使用手動裝置完全關閉該門所需的時間應不超過 90 秒；

.5 應裝有在門的兩側均能以動力啟閉該門和從駕駛室集中控制台以動力關閉該門的控制裝置；

.6 應裝有一個音響警報器，其聲音須有別於該區域內的任何其他警報器。當門以動力遙控方式關閉時，即在門開始移動之前至少 5 秒但不超過 10 秒發出聲響。並持續發聲至門完全關閉時為止。在手動遙控時，音響警報器僅在門移動過程中

發聲即可。此外，在旅客逗留區域和高環境噪聲區域，主管機關可要求在門邊增加斷續性視覺信號，作為對音響信號的補充，以及

.7 應有一個大致統一的動力關閉速度。當船舶正浮時。從門開始移動到完全關閉所需的時間，在任何情況下不得少於 20 秒或超過 40 秒。

7.2 動力式滑動水密門所使用的電力，應由應急配電板直接供應，或通過位於艙壁甲板以上的專用配電板供應，有關的控制器，指示器和警報器電路，應由應急配電板直接供電。並且在主電源或應急電源發生故障時，均能按第 42.3.1.3 條的要求，由臨時應急電源自動供電。

7.3 動力式滑動水密門應具有下列裝置之一：

.1 帶有兩個獨立動力源的集中控制的液壓系統。每一動力源須由一台原動機和一台泵組成，能夠同時關閉所有的門。此外，就整個裝置而言，應設有液力蓄壓器，其容量須足夠在 15°不利橫傾下操縱所有的門至少三次，即關閉-開啓-關閉。當液力蓄壓器處於泵開動時的壓力下，該工作循環亦應能進行。在選擇所使用的工質時，應考慮該裝置工作時可能遇到的溫度。動力操縱系統在設計上應儘量減少因液壓管系的個別故障而對一扇以上的門的操作造成不利影響的可能性。液壓系統中為動力操縱系統服務的液壓，工質儲櫃應設有低位警報器，液力蓄壓器應設有監測所儲能量損失情況的低氣壓警報器或其他有效裝置。它們均應是聲光警報器，並應位於駕駛室中的集中操縱台上；或者

.2 每一扇門帶有獨立的液壓系統，每一動力源包括能夠啟開該門的一台原動機和一台泵。此外，還應設有液壓儲壓器，其容量須足夠在 15°不利橫傾下操縱該門至少三次，即關閉-開啟-關閉。當蓄壓器處於泵開動時的壓力下，該工作循環亦應能進行。在選擇所用的工質時，應考慮該裝置工作時可能遇到的溫度。應在駕駛室集中控制台上安裝一組液力蓄力器低氣壓警報器或監測儲備能量損失情況的其他有效裝置。還應在每一就地操縱位置安裝儲備損失情況指示器；或者

.3 每一扇門上設有獨立的電氣系統，每一動力源應包括能開啟和關閉該門的一台電動機。在主電源或應急電源發生故障時，應能按第 42.4.2 條的要求，由臨時應急電源自動供電，並具有足夠容量，能在 15°不利橫傾下操縱該門至少三次，即關閉-開啟-關閉。

第 7.3.1、7.3.2 和 7.3.3 段所述的系統應配備如下：

動力式滑動水密門的動力系統，應與任何其他動力系統分開。除液壓傳動裝置之外，電力或液壓操縱系統的個別故障應不妨礙對任何門的手動操縱。

7.4 應在艙壁每一側地面以上至少 1.6 米處安裝控制手柄，且其佈置應使通過該門的人員可以使兩個手柄都保持在開啟位置，不致意外地開動關閉裝置。手柄在開門和關門時的運動方向應和門的運動方向一致，並應有明顯的指示標誌。

7.5 水密門的電氣設備和部件儘可能位於艙壁甲板之上和危險區域和處所之外。

7.6 必須安裝在艙壁甲板之下的電氣元件，其外殼應備有適當的防護，以防進水※。

※ 參閱國際電工委員會第 529，1976 號出版物的下述規定：

.1 電動機，有關電路和控制元件；達 IP × 7 級防護標準；

.2 門的位置指示器和有關電路元件；達 IP × 8 級防護標準；

.3 門的運動警告信號器；達 IP × 6 級防護標準。

如主管機關認為達到等效防護標準，可以對電氣外殼作出其他安排。達 IP × 8 級防護的外殼的水壓試驗應以在浸水 36 小時期間元件所在位置可能產生的壓力為基礎。

7.7 電源、控制器、指示器和報警器電路均應得到保護，以防一扇門的電路故障引起任何其他門的電路發生故障。一扇門的警報器或指示器的電路短路或其他故障應不致引起該門操作失靈。電路的佈置應做到即使位於艙壁甲板以下的電氣設備浸水，也不致使該門開啟。

7.8 動力式滑動水密門的動力操縱或控制系統的個別電氣故障應不致使關閉着的門開啟。應在電路上儘可能接近第 7.3 段所要求的每一個馬達之處持續地監測電源供應的情況。任何失電故障均應在駕駛室的集中控制台觸發聲光警報信號。

8.1 駕駛室的集中控制台應有一個帶有兩種控制模式的“模式轉換”開關：一是“就地控制”模式，使用之後應使任一扇門可以就地開啟或關閉，但不會自動關閉；一是“閉門”模式，它應能自動關閉任何開着的門。“閉門”模式應使門能夠就地開啟，且就地控制裝置

一釋放，即能自動重新關閉。“模式轉換”開關一般應處於“就地控制”模式。“閉門”模式只在應急狀態或試驗時才使用。應對“模式轉換”開關的可靠性給予特別的注意。

8.2 駕駛室的集中控制台應備有表示每扇門的位置的示意圖，並帶有視覺指示器，以表明各門的啟閉狀態。應以紅燈表示門完全開啟，而綠燈表示完全關閉。當門正被遙控關閉時，紅燈應閃光以表示其在中間位置。指示電路應與每扇門的控制電路分開。

8.3 應不能從集中控制台遙控開啟任何門。

9.1 除第 9.2、9.3 和 9.4 段中規定在航行中可以開啟的門外，在航行期間所有的水密門均應保持關閉狀態。第 11 段所允許的寬度超過 1.2 米的水密門只能在該段規定的情況下方可開啟。根據本段的規定開啟的任何門應隨時能立即關閉。

9.2 在航行中，為使旅客或船員得以通過，或在緊靠門處工作必需開門時，水密門可以開啟。當穿行結束或需要開門進行的工作完成時，必須立即將門關閉。

9.3 在航行中，某些特定的水密門，只在確屬必要時，即確認對輪機的安全有效的操作或對旅客平時不受限制地出入整個旅客區域有必要時，才能允許保持開啟狀態。主管機關只有在認真考慮對船舶操作和殘存能力的影響之後才能作出這種決定。允許保持此種開啓狀態的水密門應在船舶穩性資料中標明，並應隨時能立即關閉。

9.4 安裝在艙壁甲板以下甲板間的燃煤艙之間的滑動式水密門，平艙時有時可以在海上開啓。這些門的開啓和關閉應記入主管機關規定的航海日誌中。

10.1 當主管機關認為必要時，可以在分隔甲板間貨物處所的水密艙壁上安裝結構符合要求的水密門。此種門可以是鉸鏈式、滾動式或滑動式門，但不應是遙控的。它們應安裝在最高位置上並儘可能遠離船殼板。但在任何情況下，其外側垂直邊緣至船殼板之間的距離均應不小於第 2 條定義的船寬的五分之一，該距離由最深分艙載重線平面上垂直於船體中心線量計。

10.2 此種門應在航行之前關閉，並應在航行之中保護關閉狀態；船舶停港時的開門時間和離港前的關門時間應記入航海日誌，任何此種門如果在航行中可以進出，則應安裝防止未經批准擅自開門的裝置。當申請安裝此種門時，其數量和佈置應經主管機關的特別考慮。

11 除機器處所外，艙壁上不得裝設可移動式板門。此種可移式板門在船舶離港前應一直保持在原位，在航行中，除船長認為緊急需要外，亦不應挪動，拆下和重裝任何此種可移式板門時應採取必要的預防措施，以確保連接處水密。主管機關可允許在每一主橫艙壁上，用不超過一扇大於第 7.1.2 段所規定的動力式滑動水密門代替這些可移式板門，條件是這些門在船舶離港前關閉，且在航行中，除船長認為緊急需要時外，亦保持關閉。這些門無須達到第 7.1.4 段關於使用手動裝置在 90 秒內完全關閉的要求。無論船舶出海或停港，開啓和關閉這些門的時間均應記入航海日誌。

12.1 當從船員艙室通往鍋爐艙的以及為管系或任何其他目的設置的圍壁通道或隧道須穿過主水密橫艙時，它們應是水密的，並應符合第 19 條的要求。出海時用作過道的這類圍壁或隧道，應通過延伸圍壁使其至少一端的出入口的水密性高度足以允許在限界線以上通過。該圍壁通道或隧道的另一端出入口可為根據其在船上所處位置而

要求的那種水密門。此種圍壁通道或隧道不應穿過防撞艙壁以後的第一道分艙艙壁。

12.2 如建議設置穿過主水密橫艙壁的隧道，應經主管機關特殊考慮。

12.3 當與冷藏貨以及透氣或強力通風管道相連的圍壁通道要通過一道以上的水密艙壁時，這些開口處的關閉裝置應是動力操縱的，並應能在位於艙壁甲板以上的集中位置進行關閉。”

第 16 條

載運貨車和伴同人員的客船

第 2 段中參閱的“第 15.12 條”改為“第 15.10 條”。

第 21 條

艙底排水設備

將下列文字加在標題後面：

“（本條第 1.6 和 2.9 段適用於 1992 年 2 月 1 日及其後建造的船舶）”

將下列新的第 1.6 段加在第 1.5 段後面：

“1.6 應為客船艙壁甲板和貨船乾舷甲板上的圍壁貨物處所設置疏水裝置，但若主管機關認為，由於任何船舶或任何級別船舶的任何特定艙室的尺寸或內部分隔不會因為免除了疏水裝置而損害船舶安全時，可以允許免除其中的疏水裝置。

1.6.1 當量至上述艙壁甲板或乾舷甲板的乾舷使船舶橫傾超過 5° 甲板邊緣才浸水時，應用一組足夠數量和適當尺寸的泄水孔，把水直接排出舷外，對於客船，其安裝應符合第 17 條的要求，對於貨船，其安裝應符合現行《國際載重線公約》有關泄水孔、進水孔和排水孔的要求。

1.6.2 當乾舷使船舶橫傾 5°或不足 5°上述艙壁甲板或乾舷甲板上的邊緣便浸水時，艙壁甲板或乾舷甲板上的圍蔽貨物處所的疏水應通到一個或多個具有足夠容量、設有高水位報警裝置和把水排出舷外的適當裝置的處所中，此外還應確保：

.1 泄水孔的數量、尺寸和佈置能防止這些處所過度積水；

.2 本條要求的客船或貨船（視情況而定）的艙底排水裝置考慮到任何固定式壓力水霧滅火系統的需要；

.3 被石油或其他危險物質污染的水不被排到機器處所或可能有着火源的其他處所；和

.4 當圍蔽貨物處所由二氧化碳滅火系統保護時，該甲板泄水孔裝有防止窒息氣體漏逸的裝置。

第 2.9 段“D”的定義改為：

“D 係指量至艙壁甲板的船舶型深（米），但若艙壁甲板上的圍壁貨物處所按第 1.6.2 段的要求內部排水，且其長度延伸至整個船長時，D 應量至艙壁甲板的上一層甲板。當圍壁貨物處所的長度不足整個船長時，D 應量至艙壁甲板的型深加上 1h／L，其中 1 和 h 分別是圍蔽貨物處所的總長度和高度（米）”。

第 23-1 條

將下列新的第 23-1 條加在第 23 條之後：

“乾貨船破損控制

（本條適用於 1992 年 2 月 1 日及其後建造的船舶）

1. 駕駛室中應固定設置或隨時準備一張示意圖，以清晰地表明各層甲板及貨艙的水密艙室的邊界，邊界上的開口包括關閉裝置及其所有控制設備的位置、以及用來校正浸水引起的傾斜的裝置，作為值班高級船員的指南。此外，還應為船上高級船員提供載有上述資料的小冊子。

2. 所有滑動門和水密艙壁上的鉸鏈門都應配有指示器。應在駕駛室內顯示這些門的啟閉狀態。此外，船殼板上和主管機關認為若任其打開或不牢固鎖閉會導致嚴重進水的其他開口也應配有這種指示器。

3.1 在一般安全須知中應列出主管機關認為在船舶正常營運時保持水密完整性所必需的設備、條件和操作程序。

3.2 在特別安全須知中應列出主管機關認為對於船舶和船員的生存至關重要的各種事項，即關閉裝置、貨物繫固和警報器的音響等等。”

第 42 條

客船應急電源

將下列文字加在標題之後：

“（本條第 2.6.1 段和 4.2 段適用於 1992 年 2 月 1 日及其後建造的船舶）”

刪去第 2.6.1 段的第二句。

第 4.2 段的原文改為：

“4.2 按第 15.7.3.3 條要求操縱水密門的所需動力，除非備有儲備能量的臨時獨立電源，否則不必全部同時操作。按第 15.7.2 條要求為控制器、指示器和警報器電路供電半小時。”

第 II-2 章

構造-防火、探火和滅火

第 4 條

消防泵、消防總管、消火栓和消防水帶

將下列文字加在標題之後：

“（本條第 3.3.2.5 段適用於 1992 年 2 月 1 日及其後建造的船舶）”

將第 3.3.2.5 段的原文改為：

“.2.5 該泵總吸頭和實際淨吸頭應使船舶在航行時可能遇到的所有橫傾、縱傾、橫搖和縱搖情況下均能滿足本條第 3.3.2、3.3.2.1、3.3.2.2 和 4.2 段的要求。”

在第 7.1 段“的”與“材料”之間加上“不易腐”。

在第 7.1 段中，將下列新的句子加在第一句後面：

“在 1992 年 2 月 1 日及其後建造的船舶上，和在 1992 年 2 月 1 日以前建造的船舶更換現有的消防水帶時，均應配備不易腐材料消防水帶。”

第 13-1 章

將下列新的第 13-1 條加在第 13 條之後：

“取樣探煙系統

（本條適用於 1992 年 2 月 1 日及其後建造的船舶）

1 一般要求

1.1 本條文中凡出現“系統”一詞時，均指“取樣探煙系統”。

1.2 任何系統應能始終持續作業，只有按順序掃描原理工作的系統可以除外，但兩次掃描同一位置的間隔期應能使總感應時間符合主管機關的要求。

1.3 應對操作該系統所需電源的失電進行監測，任何失電應在控制板上和駕駛室觸發聲光信號，這一信號應區別於探煙指示信號。

1.4 該系統使用的電氣設備應有備用電源。

1.5 控制板應位於駕駛室或主防火控制站內。

1.6 在探測到煙氣或其他燃燒產物時，應在控制板上和駕駛室觸發聲光信號。

1.7 應在控制板上或其附近顯示清晰的信息，指明涉及的處所。

1.8 取樣管裝置應能迅速識別失火的位置。

1.9 應為該系統的試驗和維修提供適用的說明書和備件。

1.10 應定期試驗該系統的功能，使主管機關滿意。該系統的型式應能進行正確動作的試驗，並且無須更換任何部件便能恢復到正常的監測狀態。

1.11 該系統在設計、構造和安裝上應能防止任何有毒或易燃物質或滅火劑泄漏至任何居住和服務處所、控制站或機器處所。

2 安裝要求

2.1 在需要探煙的每一圍壁處所至少應裝有一個聚煙器。但是，當設計為裝載油或冷藏貨物的處所間或裝載需要煙氣取樣系統的貨物的貨油時，可以在這種艙室中為該系統設置隔離聚煙器的裝置，這種裝置應使主管機關滿意。

2.2 聚煙器的位置應使其能發揮最好性能，甲板頂部區域的任何部位聚煙器的水平距離均應不超過 12 米。如果該系統用於可能使用機械通風的處所，在考慮聚煙器的位置時，應注意到通風的影響。

2.3 聚煙器應在不易受到衝擊或機械損壞之處。

2.4 連接到每一取樣點的聚煙器不得超過四個。

2.5 來自不同的圍壁處的聚煙器不得聯接到同一取樣點。

2.6 取樣管應能自動排煙，並得到適當的保護以免受貨物作業的衝擊或損壞。

3 設計要求

3.1 該系統和設備的設計，應適於承受船上通常出現的電壓波動和瞬變、環境溫度變化、振動、潮濕、震動、衝擊和腐蝕，並能避免點燃可燃氣體和空氣混合物的可能性。

3.2 感應元件應經核證，在感應室內的煙氣密度使清晰度的減弱超過每米 6.65%之前開始工作。

3.3 應配有兩台取樣機，風機的功率應足以在保護區域正常的通風狀況下工作，且其總感應時間應使主管機關滿意。

3.4 控制板應能觀察到各個取樣管內的煙氣。

3.5 應配備監測通過取樣管的氣流的裝置，其設計應儘可能確保從相連的每一聚煙器中取出的量相同。

3.6 取樣管內的內徑至少為 12 毫米，但當取樣管與固定式氣體滅火系統共同使用時，管子的內徑應足以讓滅火氣體及時排放。

3.7 應配有定期用壓縮空氣清洗取樣管的裝置。

第 15 條

燃油、潤滑油和其他易燃油類的佈置

將下列文字加在標題之後：

“（本條第 2.6 和第 3 段適用於 1992 年 2 月 1 日及其後建造的船舶）”。

第 2.6 段的原文改為：

“.6 應配備安全有效的裝置，以確定任何燃料艙（櫃）內的存油量。

.6.1 當使用測油管時，它們不得終止於任何有點燃測油管溢油危險的處所，尤其不得終止於旅客或船員處所。測油管一般不得終止於機器處所，但主管機關如認為這一要求不可行，則於滿足下列所有要求後，可以允許測油管終止於機器處所：

.6.1.1 增配一隻符合本條第.6.2 分段要求的油位測量表；

.6.1.2 測油管終止於遠離有點燃危險之處，否則應採取預防措施，例如安裝有效的擋板，以防止測油管終端溢油時燃油接觸着火源；

.6.1.3 測油管的終端裝有自閉盲斷裝置，在盲斷裝置下方有一小直徑自閉檢查旋塞，用以確定盲斷裝置打開前没有燃油。應採取措施確保從檢查旋塞溢出的任何燃油都不會引起燃燒。

.6.2 可以用其他油位測量計代替測油管，這些裝置（如本條.6.1.1 段規定者）應符合下列條件：

.6.2.1 在客船上，當這些裝置應無須在櫃頂以下穿孔，且在出現故障或裝油過多時，燃油不會溢出；

.6.2.2 在貨船上，當這些裝置出現故障或裝油過多時，燃油應不會溢出，禁止使用圓管形玻璃油位計。主管機關可允許使用在油位計和油櫃之間設有自閉閥的平板玻璃油位計。

.6.3 第 6.2.1 或.6.2.2 段規定的裝置須經主管機關認可，並應保持良好狀態，以確保在使用時具有準確功能。”

第 3 段的原文改為：

“3 壓力潤滑系統的潤滑油的儲藏、分配和使用的佈置應確保船舶和船上人員的安全。在 A 類機器處所（以及可行的其他機器處所）中的裝置至少應符合第 2.1、2.4、2.5、2.6、2.7 和 2.8 段的規定。但是：

.1 不排除在潤滑系統中使用經試驗表明具有適度耐火能力的窺流窗；

.2 可以批准在機器處所使用測油管，如果測油管裝有適當的關閉裝置，則不必符合第 2.6.1.1 和 2.6.1.3 段的要求。”

第 18 條

雜項

將下列文字加在標題後面：

“（本條第 2.4 和 8 段適用於 1992 年 2 月 1 日及其後建造的船舶。本條第 7 段適用於所有船舶）”。

將下列新的第 2.4 段加在第 2.3 段後面：

“2.4 為保護裝載原油和閃點不超過 60°C 的石油產品的液貨艙，防止火焰蔓延到貨物，在熱力作用下易於失效的材料，不應用於閥門、配件、貨艙口蓋，貨物透氣管和貨物管系”。

將下列新的第 7 段和第 8 段加在第 6 段的後面：

“7 應設置經主管機關認可的適當滅火裝置以保護油漆間和易燃液體間。

8. 直升飛機甲板應為鋼質或等效於鋼質的防火結構。如直升飛機甲板下面為較大失火危險處所，則絕緣標準應符合主管機關的要求。每一直升飛機設施均應有操作手冊，包括說明書和安全措施、核查清單、操作程序以及設備要求。如果主管機關允許使用鋁或其他不等效於鋼的低溶點金屬結構，則應達到下述規定：

.1 如果平台懸伸於船舷之外，每當船舶或平台失火之後，應對平台進行一次結構分析，以確定其是否適於繼續使用。

.2 如果平台位於船舷甲板室或類似結構之上，應滿足下述條件：

.2.1 平台下面的甲板室頂和圍壁應無開口；

.2.2 平台下面的窗子均應安裝鋼質百葉窗；

.2.3 所要求的消防設備應經主管機關認可；

.2.4 平台上或其附近每次發生火災之後，應對平台進行一次結構分析，以確定其是否適於繼續使用。”

第 26 條

載客超過 36 人的客船艙壁及甲板的耐火完整性

將下列文字加在標題後面：

“（本條第 2.2（7）和 2.2（13）段適用於 1992 年 2 月 1 日及其後建造的船舶）”。

第 2.2（7）段的第三句原文改為：

“起居處所內面積小於 4 平方米的獨立小間和小儲物間（其中不存放易燃液體）”。

在 2.2（13）後面增加下列句子：

“除有儲藏易燃液體設備的處所之外的面積大於 4 平方米的小間和儲藏室。”

第 27 條

載客不超過 36 人的客船艙壁及甲板的耐火完整性

將下列文字加在標題後面：

“（本條第 2.（5）和 2.（9）段適用於 1992 年 2 月 1 日及其後建造的船舶）”

將 2.（5）和 2.（9）段改為：

“（5）較小失火危險的服務處所

除有儲藏易燃液體設備的處所之外的面積小於 4 平方米的小間和儲藏室以及乾燥間和洗衣間。”

“（9）較大失火危險的服務處所

廚房，設有烹調設備的配膳室，油漆間和燈具間，面積為 4 平方米或以上的小間和儲藏室，儲藏易燃液體的處所，以及不屬於機器處所一部分的工作間。”

第 38 條

除特種處所外的用於載運油箱中備有自用燃料的機動車輛的裝貨處所的保護

將下列文字加在標題後面：

“（本條第 1 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將第 1 段修改如下：

“1 固定探火

應配備符合第 13 條要求的固定探火和失火報警系統或符合第 13-1 條要求的取樣探煙系統，該系統的設計和佈置應與第 3 段所述的通風要求一起考慮。”

第 40 條

防火巡邏、探火、失火報警和廣播系統

將下列文字加在標題後面：

“（本條第 2 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將現有的第 2 段改為：

“2 在主管機關認為不能到達的任何載貨處所內，應配備符合第 13 條要求的固定探火和失火報警系統或符合第 13-1 條要求的取樣探煙系統，但如證明船舶航程短，適用本要求不合理，並經主管機關同意者除外。”

第 44 條

艙壁和甲板的耐火完整性

將下列文字加在標題後面：

“（本條第 2.（5）和 2.（9）段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將第 2.（5）和 2.（9）段原文改為：

“（5）較小失火危險的服務處所

除有儲藏易燃液體設備的處所之外的面積小於 4 平方米的小間和儲藏室，以及乾燥間和洗衣間。”

“（9）較大失火危險的服務處所

廚房，設有烹調設備的配膳室，油漆間和燈具間，面積為 4 平方米或以上的小間和儲藏易燃液體的處所，以及不屬於機器處所一部分的工作間。”

第 50 條

構造細節

將下列文字加在標題後面：

“（本條第 3.2 和 3.3 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將 3.2 段原文改為：

“3.2 如起居處所和服務處所內的艙壁、襯板和天花板為不燃材料，在該區域內可以裝有厚度限制在發熱值不超過 45 兆焦耳／平方米的可燃鑲片 。”

將下列新的 3.3 段加在 3.2 段後面：

“3.3 以不燃艙壁，天花板和襯板為邊界的任何起居處所和服務處所內的可燃貼面、嵌條、裝潢和鑲片的總體積，應不超過牆壁和天花板總面積上厚 2.5 毫米的鑲片的體積。”

將原第 3.3 段改為第 3.4 段。

第 53 條

裝貨處所內的防火裝置

將下列文字加在標題後面：

“（本條第 2.1 和 3 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

第 1.2 段第 1 行末的“木料”和“不燃”之間的“和”字改為“，”。

在第 1.2 段末尾增加一個星號，並加上下列腳註：

“※參閱《固體散裝貨物安全實用規則》－應急表編號 B14，關於煤的條目”。

將 2.1 段原文改為：

“2.1 應配備符合第 13 條要求的固定探火和失火報警系統，該固定探火系統應能迅速探出剛剛發生的火情，探測器的型式、間隔和位置應使主管機關滿意並要考慮通風以及其他有關因素的影響。該系統安裝後應在正常的通風情況下進行測試，其總感應時間應使主管機關滿意。”

將第 3 段原文改為：

“3 滾裝裝貨處所以外的載運油箱中裝有自用燃料的機動車輛的裝貨處所

滾裝裝貨處所以外的載運油箱中裝有自用燃料的機動車輛的裝貨處所應符合本條第 2 段的要求。但可允許用符合第 13-1 條要求的取樣探煙系統代替本條第 2.1 段的要求，且無須符合本條第 2.2.4 段的要求。”

第 54 條

載運危險貨物船舶的特殊要求

將下列文字加在標題後面：

“（本條第 2.3 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將第 1.1 段原文及其腳註改為：

“1.1 除應符合第 53 條對貨船和第 37、※38 與 39 條對客船的相應要求以外，本條第 1.2 段所指載運危險貨物的船舶類型和裝貨處所尚應符合本條的相應要求，但載運有限數量※※的危險貨物時除外，除非這種要求由於遵守本章其他條文的規定已得到滿足。船舶類型和載運危險貨物的方式在本條第 1.2 段和表 54.1 中列出，出現在第 1.2 段各項的序號已列於該表的頂行。1992 年 2 月 1 日及其後建造的 500 總噸以下的貨船應符合本條的要求，但主管機關可以降低這些要求，而降低了的要求應記錄在第 3 段所指的合格證件中。”

將第 2.3 段原文改為：

“2.3 探測系統

滾裝貨物處所內應裝設符合第 13 條要求的固定式探火和失火報警系統。所有其他類型的貨物處所應裝設符合第 13 條要求的固定式探火和失火報警系統或者符合第 13-1 條的取樣探煙系統，如裝設取樣探煙系統，為防止有毒煙氣漏入有人處所，應特別注意第 13-1.1.11 條的要求。”

※ 與本條要求相關的操作方法參見《國際海上危險貨物運輸規則》（IMDG 規則）總論第 17 節。

※※ “有限數量”一詞的定義參見《國際海上危險貨物運輸規則》（IMDG 規則）總論第 18 節。

第 55 條

適用範圍

將第 5 段原文改為：

“5 第 60 條關於惰性氣體系統的要求不必適用於：

.1 所有在 1986 年 7 月 1 日及其前、後建造的載運第 1 段規定的貨物而又符合本組織制定的化學品液貨船惰性氣體系統要求※的化學品液貨船；或

.2 所有在 1986 年 7 月 1 日之前建造的、載運原油或石油產品而又符合本組織制定的關於載運石油產品的化學品液貨船惰性氣體系統要求※※的化學品液貨船；或

※ 參閱本組織通過的大會 A.567（14）號決議《化學品液貨船惰性氣體系統規則》

※※參閱本組織通過的大會 A.473（XII）號決議《關於載運石油產品的化學品液貨船惰性氣體系統的暫行規定》

.3 所有在 1986 年 7 月 1 日及其前、後建造的，載運第 1 段規定的貨物而又裝有與第 5.1 或 5.2 段的要求相當的液貨艙惰性氣體裝置的液化氣體船；或

.4 載運除原油或石油產品以外的易燃貨物，如《散裝運輸危險化學品船舶構造與設備規則》第 VI 和第 VII 章或《國際散裝運輸危險化學品船舶構造與設備規則》第 17 和 18 章所列貨物的化學品液貨船和液化氣體船：

.4.1 1986 年 7 月 1 日之前建造者；或

.4.2 於 1986 年 7 月 1 日及其後建造者，但其液貨艙容積不得超過 3,000 立方米，洗艙機噴咀排量不得超過 17.5 立方米／小時，在一個貨艙內同時使用的所有洗艙機的總排量不得超過 110 立方米／小時。

第 56 條

各處所的位置和分隔

將本條原文改為：

“（本條文適用於 1992 年 2 月 1 日及其後建造的船舶）。

1 機器處所應位於貨油艙和污油水艙的後方，也應位於貨油泵艙和隔離空艙的後方，但不必位於燃油艙的後方。任何機器處所均應以隔離空艙、貨油泵艙、燃油艙或壓載艙同貨油艙和污油水艙隔開。凡設有向相鄰於貨油艙和污油水艙的處所加壓載水的泵及其附件的泵艙和設有燃油駁運泵的泵艙，均應認為與條內的貨油泵艙等效。這些泵艙所具有的安全標準應與貨油泵艙所要求者相同。然而，泵艙的下部可以凹入 A 類機器處所，以便安置泵，其條件是凹入部分的頂板高度一般不超過龍骨以上三分之一型深，但對於載重量不超過 25,000 噸的船舶，在證明這一高度會由於進入壁凹部分和妥善佈置管系的原因而不切實際時，主管機關可以允許凹入部分超過上述高度，但不超過龍骨以上一半型深。

2 起居處所，貨油主控制站、控制站和服務處所（獨立的起貨設備儲藏室除外）均應位於所有貨油艙、污油水艙和用於隔開貨油艙或污油水艙與機器處所的隔離空艙的後方而不必位於燃油艙和壓載艙的後方，但應佈置成不致因甲板或艙壁的個別故障導致貨油艙的蒸氣

或煙霧進入起居處所、貨油主控制站、控制站或服務處所。在確定這些處所的位置時，不必計及本條第 1 段所述的壁凹部分。

3 但是，當主管機關認為必要時，可允許起居處所、貨油主控制站、控制站和服務處所位於貨油艙、污油水艙以及隔離貨油艙和污油水艙與機器處所的隔離空艙的前方而不必為於燃油儲存艙和壓載艙的前方。除 A 類以外的機器處所，如以隔離空艙、貨油泵艙、燃油艙或壓載艙同貨油艙和污油水艙隔開，可以允許位於貨油艙和污油水艙之前。所有上述的處所應具備符合主管機關要求的等效安全標準和適當的滅火裝置。起居處所、貨油主控制站、控制站和服務處所的佈置應不致因甲板或艙壁的個別故障而導致貨油艙的蒸氣或煙霧進入這些處所。此外，當主管機關認為對船舶安全或航行有必要時，可以允許設有功率大於 375 千瓦且不作為主推進機械的內燃機的機器處所位於貨物區域的前方，但其佈置應符合本段的規定。

4 僅適用於混裝船：

.1 除污油水艙在乾貨航程中可能載有污油水，且其限界面為船殼、主貨物甲板、貨油泵艙艙壁或燃油艙者外，污油水艙應以隔離空艙圍隔。這些隔離空艙不得向雙層底、管遂、泵艙或其他封閉處所開口。應設置向這些隔離空艙注水和從中排水的裝置。當污油水艙的限界面為貨泵艙艙壁時，該貨泵艙不得向雙層底、管遂或其他圍壁處所開口，但可以允許設有氣密螺栓蓋的開孔。

.2 應提供設施以切斷連接泵艙和本條第 4.1 段所述污油水艙的管系。切斷設施應包括一隻閥、其後接裝雙環盲板法蘭或具有適當盲板法蘭的短管。此項裝置應鄰接於污油水艙，但若

此種佈置不合理或不可行時，可以設置在泵艙內緊靠管路穿過艙壁之處。應設有併入裝貨總管的獨立的泵及管系裝置，以便當船舶從事於乾貨運輸時將污油水艙內的污物直接經開敞甲板向岸上排放。

.3 污油水艙的艙口和洗艙孔只允許設在開敞甲板上，並應配備關閉裝置。這些關閉裝置應有鎖緊設施，並由負責的高級船員控制，但有螺栓固定的蓋板且螺栓間距保證水密者可以除外。

.4 如設有邊貨油艙時，甲板下的貨油管系應設在這些邊艙內。但主管機關可允許貨油管系設在能充分清洗和通風的特別導管內，其佈置應使主管機關滿意。若未設邊貨油艙，則甲板下的貨油管系應設在特別導管內。

5 如有必要把駕駛室佈置在貨油區域上方，則此處所只能用於駕駛目的，並用一個高度至少為 2 米的開敞空間使之與貨油艙甲板隔開。此外，這種駕駛室的防火還應符合本部分第 58.1 和 58.2 條對控制處所的要求，以及本部分中可適用的其他規定。

6 應設有使甲板上的溢油與起居和服務區域隔開的設施。該設施可以是一個有適當高度並延伸至兩舷的連續固定擋板。對於具有尾部裝油設施的船舶，此項擋油佈置應予特別考慮。

7 圍壁起居處所的上層建築和甲板室的外部限界面包括支承這些起居處所的任何懸伸甲板、其整個面向貨物區城的部分及距此端面 3 米之內的外側面，應隔熱至“A-60”級標準。對於這種上層建築和甲板室的兩側，此項分隔應達到主管機關認為必要的高度。

8.1 除下面第 8.2 段所允許者外，通往起居處所、服務處所、控制站和機器處所的入口、空氣進口和開口不得面向貨物區域。它們應位於下面向貨物區域的端艙壁上，或位於上層建築或甲板室的外側，距離上層建築或甲板室面向貨物區域的端壁至少為船長的 4%，但不少於 3 米處。然而，這個距離毋須超過 5 米。

8.2 主管機關可允許在面向貨物區域或第 8.1 段所規定的 5 米限制範圍內的限界面圍壁上裝設通往主貨物控制站和諸如食品庫、儲藏室和小間等服務處所的門，但這些處所不得直接或間接通往任何其他包含或用作下列艙室的處所：起居處所、控制站、諸如廚房、配膳室、工作間等服務處所或有蒸氣着火源的類似處所。處所的限界面應隔熱至“A-60”級標準，但面向貨物區域的限界面除外。在上述第 8.1 段規定的限制範圍之內，為便於拆移機器，可以設置用螺栓緊固的板門。只要駕駛室的門窗設計成能保證駕駛室迅速而有效地達到氣密，它們就可以位於上述第 8.1 段所規定的限制範圍之內。

8.3 面向貨物區域和在第 8.1 段所指的限制範圍內上層建築及甲板室側壁上的窗和舷窗應為固定（不能開啟）型。在主甲板上第一層的這種窗和舷窗應裝有鋼質或其他等效材料制成的內蓋。

第 58 條

艙壁和甲板的耐火完整性

將下列文字加在標題後面：

“（本條第 2.（5）和 2.（9）段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將第 2.（5）和 2.（9）段原文改為：

“（5）較小失火危險的服務處所

無儲藏易燃液體設備而面積小於 4 平方米的小間和儲藏室，以及乾燥間和洗衣間”

“（9）較大失火危險的服務處所

廚房、設有烹調設備的配膳室、油漆間和燈具間，面積為 4 平方米或以上的小間和儲藏室，儲藏易燃液體的處所，以及不屬於機器處所一部分的工作間。”

第 59 條

透氣、清除、除氣和通風

將下列文字加在標題後面：

“（本條第 2 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將第 2 段原文改為：

“2 貨艙清除和／或除氣※

清除和／或除氣裝置應能最大限度地減少由於易燃蒸氣散發到空氣中或貨艙中具有易燃混合物所造成的危險性。因此：

.1 當船舶裝有惰性氣體系統時，應根據第 62.13 條的規定，首先清除貨艙，直至室艙內碳氫化合物蒸氣的體積濃度減少到 2%以下。然後，才能在貨油艙甲板平面上進行除氣作業。

.2 當船舶未安裝惰性氣體系統時，則在開始時排除易燃蒸氣的工作應該這樣來進行：

2.1 通往第 1.9 段所述的透氣口；或者

2.2 通往貨油艙甲板平面以上至少 2 米的出口，在除氣作業過程中保持至少 30 米／秒的垂直噴射速度；或者

2.3 通往貨油艙甲板平面以上至少 2 米的出口、以至少 20 米／秒的垂直噴射速度並用適當的裝置加以保護，防止火焰進入。

當出口處易燃蒸氣的濃度降至可燃下限的 30%時，除氣工作才可在貨油艙甲板平面上繼續進行。

第 62 條

惰性氣體系統

將下列文字加在標題後面：

“（本條第 19.1 和 19.2 段適用於 1992 年 2 月 1 日及其後建造的船舶）。”

將第 19.1 段第 1 行原文改為：

“對於煙氣式和惰性氣體發生器式的惰性氣體系統，均應裝設聲光警報器，以顯示：”。

將第 19.2 段前 2 行原文改為：

“對於惰性氣體發生器式的惰性氣體系統，還應增設聲光警報器，以顯示：”。

※ 參閱經修訂的“防火焰進入液貨艙裝置的設計，試驗和佈置標準

“（MSC／Circ.373／Rev.1）和經修訂的“設計液貨艙透氣和除氣裝置應考慮的諸因素”（MSC／Circ.450／Rev.1）”。

第 III 章

救生設備與佈置

第 41 條

救生艇的一般要求

將第 8.18 段原文改為：

“印在防水卡片上，或裝在防水容器內的第 V／16 條所述的救生信號圖解說明表 1 張”。

第 48 條

放艇與登乘設備

將第 1.4 段原文中的“o”改為“y”（僅西班牙文本）。

第 IV 章

第 13 條

裝於機動救生艇上無線電設備

將原標題改為“救生艇上的無線電設備”。

將第（a）段第一行中的“第 III 章第 14 條”改為“第 III／6.2.2 條”。

將第(h)段第二行中的“第 III 章第 14 條”改為“第 III／41.8.29 條”。

第 14 條

救生艇筏的手提式無線電設備

將第（a）段第 1 行中的“第 III 章第 13 條”改為“第 III／6.2.1 條”。

第 V 章

航行安全

第 3 條

危險通報內所需的情報

將第（a）（iii），（b）（ii）和（e）（i）分段括號內的“格林威治平時”改為“世界協調時”。

在“舉例”中的各“格林威治平時”改為“世界協調時”。

第 9 條

誤用遇險信號

將本條原文改為：

“除表示正有船舶、飛機或人遇險外，禁止使用國際遇險信號及任何與國際遇險信號可能混淆的信號。”

第 12 條

船載導航設備

將第（f）段原文改為：

“（f） 具有應急操舵位置的船舶，至少應配備一台電話或其他通信設備，用以向這些位置傳遞航向信息。此外，於 1992 年 2 月 1 日及其後建造的 500 總噸及以上的船舶應裝設向應急操舵位置提供視覺羅經讀數的設備。”

第 13 條

配 員

將第 V／13 條原文重新編號為第（a）段。

增加下列新的第（b）段：

“（b）應為本公約第 I 章所適用的所有船舶提供一個由主管機關頒發的適當的安全定員文件或等效文件，作為符合第（a）段規定所需的最低安全定員的證明。”

第 16 條

救生信號

將本條原文改為：

“救生站，海上救助單位和從事搜救作業的飛機同遇險船舶和人員，或同指揮船舶進行通信時，以及遇險船舶或人員同救生站、海上救助單位和從事搜救作業的飛機通信時，應使用救生信號※。凡適用本章的船舶應備有說明各種救生信號的圖解說明表，以供該船值班駕駛員隨時取用。

第 VII 章

危險貨物運輸

第 7 條

將本條原文改為：

“客船上的爆炸品※※

1 客船上可以裝載任何數量的第 1.4 分類 S 配裝類爆炸品。此外不得裝載其他爆炸品，但下列情況除外：

.1 救生用的爆炸物品，每種船上此種物品的淨爆炸品總質量不超過 50 千克，或

.2 C，D 和 E 配裝類爆炸物品，每艘船上淨爆炸品總質量不超過 10 千克；

.3 不要求特殊儲存的 G 配裝類爆炸物品，每艘船上淨爆炸品總質量不超過 10 千克；

.4 B 配裝類爆炸品，每艘船上淨爆炸品總質量不超過 5 千克。

2 儘管第 1 段有規定，如果在客船上採取了主管機關認可的特別安全措施，仍然可以增加裝運的爆炸品的數量和種類。

※ 這些救生信號見於“商船搜救手冊”（MERSAR）（經修訂的大會第 A.229（VII）號決議），“國際海事組織搜救手冊”（IMOSAR）（經修訂的大會第 A.439（XI）號決議的說明，以及根據大會第 A.80（IV）決議修訂的“國際信號規則”的圖解。

※※參閱《國際海上危險貨物運輸規則》（IMDG 規則）中的第 1 類。

RESOLUTION MSC.13(57)
(adopted on 11 April 1989)

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

THE MARITIME SAFETY COMMITTEE,

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

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

HAVING CONSIDERED at its fifty-seventh 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, the 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 31 July 1991 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 February 1992 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 International Convention for the Safety of Life at Sea, 1974;

5. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution 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, AS AMENDED

Chapter II-1

CONSTRUCTION - SUBDIVISION AND STABILITY MACHINERY AND ELECTRICAL INSTALLATIONS

Regulation 11

The existing heading is replaced by the following:

"Peak and machinery space bulkheads and stern tubes in cargo ships".

The following text is inserted after the heading:

"(Paragraphs 8 and 9 of this regulation apply to ships constructed on or after 1 February 1992)".

The following new paragraphs 8 and 9 are added after paragraph 7:

"8 Bulkheads shall be fitted separating the machinery space from cargo and passenger spaces forward and aft and made watertight up to the freeboard deck.

9 Stern tubes shall be enclosed in a watertight space (or spaces) of moderate volume. Other measures to minimize the danger of water penetrating into the ship in case of damage to stern tube arrangements may be taken at the discretion of the Administration".

Regulation 12

Double bottoms in passenger ships

In paragraph 5 the words "regulation III/2" in the third line is replaced by "regulation III/3.16".

Regulation 12-1

The following new regulation II-1/12-1 is added after regulation 12:

"Double bottoms in cargo ships other than tankers

(This regulation applies to ships constructed on or after 1 February 1992)

1 A double bottom shall be fitted extending from the collision bulkhead to the afterpeak bulkhead, as far as this is practicable and compatible with the design and proper working of the ship.

2 Where a double bottom is required to be fitted, its depth shall be to the satisfaction of the Administration and the inner bottom shall be continued out to the ship's side in such a manner as to protect the bottom to the turn of the bilge.

3 Small wells constructed in the double bottom, in connection with the drainage arrangements of holds, shall not extend in depth more than necessary. A well extending to the outer bottom, may, however, be permitted at the after end of the shaft tunnel of the ship. Other wells may be permitted by the Administration if it is satisfied that the arrangements give protection equivalent to that afforded by a double bottom complying with this regulation.

4 A double bottom need not be fitted in way of watertight compartments used exclusively for the carriage of liquids, provided the safety of the ship in the event of bottom damage is not, in the opinion of the Administration, thereby impaired".

Regulation 15

The existing text of this regulation is replaced by the following:

"Openings in watertight bulkheads in passenger ships

(This regulation applies to ships constructed on or after 1 February 1992)

1 The number of openings in watertight bulkheads shall be reduced to the minimum compatible with the design and proper working of the ship; satisfactory means shall be provided for closing these openings.

2.1 Where pipes, scuppers, electric cables, etc., are carried through watertight subdivision bulkheads, arrangements shall be made to ensure the watertight integrity of the bulkheads.

2.2 Valves not forming part of a piping system shall not be permitted in watertight subdivision bulkheads.

2.3 Lead or other heat sensitive materials shall not be used in systems which penetrate watertight subdivision bulkheads, where deterioration of such systems in the event of fire would impair the watertight integrity of the bulkheads.

3.1 No doors, manholes, or access openings are permitted:

.1 in the collision bulkhead below the margin line;

.2 in watertight transverse bulkheads dividing a cargo space from an adjoining cargo space or from a permanent or reserve bunker, except as provided in paragraph 10.1 and in regulation 16.

3.2 Except as provided in paragraph 3.3, the collision bulkhead may be pierced below the margin line by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a screwdown valve capable of being operated from above the bulkhead deck, the valve chest being secured inside the forepeak to the collision bulkhead. The Administration

may, however, authorize the fitting of this valve on the after side of the collision bulkhead provided that the valve is readily accessible under all service conditions and the space in which it is located is not a cargo space.

3.3 If the forepeak is divided to hold two different kinds of liquids the Administration may allow the collision bulkhead to be pierced below the margin line by two pipes, each of which is fitted as required by paragraph 3.2, provided the Administration is satisfied that there is no practical alternative to the fitting of such a second pipe and that, having regard to the additional subdivision provided in the forepeak, the safety of the ship is maintained.

4.1 Watertight doors fitted in bulkheads between permanent and reserve bunkers shall always be accessible, except as provided in paragraph 9.4 for between-deck bunker doors.

4.2 Satisfactory arrangements shall be made by means of screens or otherwise to prevent the coal from interfering with the closing of watertight bunker doors.

5 Subject to paragraph 11, not more than one door, apart from the doors to bunkers and shaft tunnels, may be fitted in each main transverse bulkhead within spaces containing the main and auxiliary propulsion machinery including boilers serving the needs of propulsion and all permanent bunkers. Where two or more shafts are fitted, the tunnels shall be connected by an intercommunicating passage. There shall be only one door between the machinery space and the tunnel spaces where two shafts are fitted and only two doors where there are more than two shafts. All these doors shall be of the sliding type and shall be so located as to have their sills as high as practicable. The hand gear for operating these doors from above the bulkhead deck shall be situated outside the spaces containing the machinery.

6.1 Watertight doors, except as provided in paragraph 10.1 or regulation 16, shall be power-operated sliding doors complying with the requirements of paragraph 7 capable of being closed simultaneously from the central operating console at the navigating bridge in not more than 60 seconds with the ship in the upright position.

6.2 The means of operation whether by power or by hand of any power-operated sliding watertight door shall be capable of closing the door with the ship listed to 15° either way. Consideration shall also be given to the forces which may act on either side of the door as may be experienced when water is flowing through the opening applying a static head equivalent to a water height of at least 1 m above the sill on the centreline of the door.

6.3 Watertight door controls, including hydraulic piping and electric cables, shall be kept as close as practicable to the bulkhead in which the doors are fitted, in order to minimize the likelihood of them being involved in any damage which the ship may sustain. The positioning of watertight doors and their controls shall be such that if the ship sustains damage within one fifth of the breadth of the ship, as defined in regulation 2, such distance being measured at right angles to the centreline at the level of the deepest subdivision load line, the operation of the watertight doors clear of the damaged portion of the ship is not impaired.

6.4 All power-operated sliding watertight doors shall be provided with means of indication which will show at all remote operating positions whether the doors are open or closed. Remote operating positions shall only be at the navigating bridge as required by paragraph 7.1.5 and, at the location where hand operation above the bulkhead deck is required by paragraph 7.1.4.

7.1 Each power-operated sliding watertight door:

.1 shall have a vertical or horizontal motion;

.2 shall, subject to paragraph 11, be normally limited to a maximum clear opening width of 1.2 m. The Administration may permit larger doors only to the extent considered necessary for the effective operation of the ship provided that other safety measures, including the following, are taken into consideration:

.1 special consideration shall be given to the strength of the door and its closing appliances in order to prevent leakages;

.2 the door shall be located outside the damage zone B/5;

.3 the door shall be kept closed when the ship is at sea, except for limited periods when absolutely necessary as determined by the Administration;

.3 shall be fitted with the necessary equipment to open and close the door using electric power, hydraulic power, or any other form of power that is acceptable to the Administration;

.4 shall be provided with an individual hand-operated mechanism. It shall be possible to open and close the door by hand at the door itself from either side, and in addition, close the door from an accessible position above the bulkhead deck with an all round crank motion or some other movement providing the same degree of safety acceptable to the Administration. Direction of rotation or other movement is to be clearly indicated at all operating positions. The time necessary for the complete closure of the door, when operating by hand gear, shall not exceed 90 seconds with the ship in the upright position;

.5 shall be provided with controls for opening and closing the door by power from both sides of the door and also for closing the door by power from the central operating console at the navigating bridge;

.6 shall be provided with an audible alarm, distinct from any other alarm in the area, which will sound whenever the door is closed remotely by power and which shall sound for at least five seconds but no more than ten seconds before the door begins to move and shall continue sounding until the door is completely closed. In the case of remote hand operation it is sufficient for the audible alarm to sound only when the door is moving. Additionally, in passenger areas and areas of high ambient noise the Administration may require the audible alarm to be supplemented by an intermittent visual signal at the door; and

.7 shall have an approximately uniform rate of closure under power. The closure time, from the time the door begins to move to the time it reaches the completely closed position, shall in no case be less than 20 seconds or more than 40 seconds with the ship in the upright position.

7.2 The electrical power required for power-operated sliding watertight doors shall be supplied from the emergency switchboard either directly or by a dedicated distribution board situated above the bulkhead deck. The associated control, indication and alarm circuits shall be supplied from the emergency switchboard either directly or by a dedicated distribution board situated above the bulkhead deck and be capable of being automatically supplied by the transitional source of emergency electrical power required by regulation 42.3.1.3 in the event of failure of either the main or emergency source of electrical power.

7.3 Power-operated sliding watertight doors shall have either:

.1 a centralized hydraulic system with two independent power sources each consisting of a motor and pump capable of simultaneously closing all doors. In addition, there shall be for the whole installation hydraulic accumulators of sufficient capacity to operate all the doors at least three times, i.e. closed-open-closed, against an adverse list of 15°. This operating cycle shall be capable of being carried out when the accumulator is at the pump cut-in pressure. The fluid used shall be chosen considering the temperatures liable to be encountered by the installation during its service. The power operating system shall be designed to minimize the possibility of having a single failure in the hydraulic piping adversely affect the operation of more than one door. The hydraulic system shall be provided with a low-level alarm for hydraulic fluid reservoirs serving the power-operated system and a low gas pressure alarm or other effective means of monitoring loss of stored energy in hydraulic accumulators. These alarms are to be audible and visual and shall be situated on the central operating console at the navigating bridge; or

.2 an independent hydraulic system for each door with each power source consisting of a motor and pump capable of opening and closing the door. In addition, there shall be a hydraulic accumulator of sufficient capacity to operate the door at least three times, i.e. closed-open-closed, against an adverse list of 15°. This

operating cycle shall be capable of being carried out when the accumulator is at the pump cut-in pressure. The fluid used shall be chosen considering the temperatures liable to be encountered by the installation during its service. A low gas pressure group alarm or other effective means of monitoring loss of stored energy in hydraulic accumulators shall be provided at the central operating console on the navigating bridge. Loss of stored energy indication at each local operating position shall also be provided; or

.3 an independent electrical system and motor for each door with each power source consisting of a motor capable of opening and closing the door. The power source shall be capable of being automatically supplied by the transitional source of emergency electrical power as required by regulation 42.4.2 - in the event of failure of either the main or emergency source of electrical power and with sufficient capacity to operate the door at least three times, i.e. closed-open-closed against an adverse list of 15°.

For the systems specified in 7.3.1, 7.3.2 and 7.3.3, provision should be made as follows:

Power systems for power-operated watertight sliding doors shall be separate from any other power system. A single failure in the electric or hydraulic power-operated systems excluding the hydraulic actuator shall not prevent the hand operation of any door.

7.4 Control handles shall be provided at each side of the bulkhead at a minimum height of 1.6 m above the floor and shall be so arranged as to enable persons passing through the doorway to hold both handles in the open position without being able to set the power closing mechanism in operation accidentally. The direction of movement of the handles in opening and closing the door shall be in the direction of door movement and shall be clearly indicated.

7.5 As far as practicable, electrical equipment and components for watertight doors shall be situated above the bulkhead deck and outside hazardous areas and spaces.

7.6 The enclosures of electrical components necessarily situated below the bulkhead deck shall provide suitable protection against the ingress of water.*

7.7 Electric power, control, indication and alarm circuits shall be protected against fault in such a way that a failure in one door circuit will not cause a failure in any other door circuit. Short circuits or other faults in the alarm or indicator circuits of a door shall not result in a loss of power operation of that door. Arrangements shall be such that leakage of water into the electrical equipment located below the bulkhead deck will not cause the door to open.

7.8 A single electrical failure in the power operating or control system of a power-operated sliding watertight door shall not result in a closed door opening. Availability of the power supply should be continuously monitored at a point in the electrical circuit as near as practicable to each of the motors required by paragraph 7.3. Loss of any such power supply should activate an audible and visual alarm at the central operating console at the navigating bridge.

---

* Reference is made to the following IEC publication 529 : 1976:

.1 electrical motors, associated circuits and control components; protected to IP x 7 standard;

.2 door position indicators and associated circuit components; protected to IP x 8 standard; and

.3 door movement warning signals; protected to IP x 6 standard.

Other arrangements for the enclosures of electrical components may be fitted provided the Administration is satisfied that an equivalent protection is achieved. The water pressure testing of the enclosures protected to IP x 8 shall be based on the pressure that may occur at the location of the component during flooding for a period of 36 hours.

8.1 The central operating console at the navigating bridge shall have a "master mode" switch with two modes of control: a "local control" mode which shall allow any door to be locally opened and locally closed after use without automatic closure, and a "doors closed" mode which shall automatically close any door that is open. The "doors closed" mode shall permit doors to be opened locally and shall automatically reclose the doors upon release of the local control mechanism. The "master mode" switch shall normally be in the "local control" mode. The "doors closed" mode shall only be used in an emergency or for testing purposes. Special consideration shall be given to the reliability of the "master mode" switch.

8.2 The central operating console at the navigating bridge shall be provided with a diagram showing the location of each door, with visual indicators to show whether each door is open or closed. A red light shall indicate a door is fully open and a green light shall indicate a door is fully closed. When the door is closed remotely the red light shall indicate the intermediate position by flashing. The indicating circuit shall be independent of the control circuit for each door.

8.3 It shall not be possible to remotely open any door from the central operating console.

9.1 All watertight doors shall be kept closed during navigation except that they may be opened during navigation as specified in paragraphs 9.2, 9.3 and 9.4. Watertight doors of width of more than 1.2 m permitted by paragraph 11 may only be opened in the circumstances detailed in that paragraph. Any door which is opened in accordance with this paragraph shall be ready to be immediately closed.

9.2 A watertight door may be opened during navigation to permit the passage of passengers or crew, or when work in the immediate vicinity of the door necessitates it being opened. The door must be immediately closed when transit through the door is complete or when the task which necessitated it being open is finished.

9.3 Certain watertight doors may be permitted to remain open during navigation only if considered absolutely necessary; that is, being open is determined essential to the safe and effective operation of the ship's

machinery or to permit passengers normally unrestricted access throughout the passenger area. Such determination shall be made by the Administration only after careful consideration of the impact on ship operations and survivability. A watertight door permitted to remain thus open shall be clearly indicated in the ship's stability information and shall always be ready to be immediately closed.

9.4 Sliding watertight doors fitted between bunkers in the between-decks below the bulkhead deck may sometimes be open at sea for the purpose of trimming coal. The opening and closing of these doors shall be recorded in such log book as may be prescribed by the Administration.

10.1 If the Administration is satisfied that such doors are essential, watertight doors of satisfactory construction may be fitted in watertight bulkheads dividing cargo between deck spaces. Such doors may be hinged, rolling or sliding doors but shall not be remotely controlled. They shall be fitted at the highest level and as far from the shell plating as practicable, but in no case shall the outboard vertical edges be situated at a distance from the shell plating which is less than one fifth of the breadth of the ship, as defined in regulation 2, such distance being measured at right angles to the centreline at the level of the deepest subdivision load line.

10.2 Such doors shall be closed before the voyage commences and shall be kept closed during navigation; the time of opening such doors in port and of closing them before the ship leaves port shall be entered in the log book. Should any of the doors be accessible during the voyage, they shall be fitted with a device which prevents unauthorized opening. When it is proposed to fit such doors, the number and arrangements shall receive the special consideration of the Administration.

11 Portable plates on bulkheads shall not be permitted except in machinery spaces. Such plates shall always be in place before the ship leaves port, and shall not be removed during navigation except in case of urgent necessity at the discretion of the master. The times of removal and replacement of any such portable plates shall be recorded in the log book, and the necessary precautions shall be taken in replacing them to ensure that the joints are

watertight. The Administration may permit not more than one power-operated sliding watertight door in each main transverse bulkhead larger than those specified in paragraph 7.1.2 to be substituted for these portable plates, provided these doors are closed before the ship leaves port and remain closed during navigation except in case of urgent necessity at the discretion of the master. These doors need not meet the requirements of paragraph 7.1.4 regarding complete closure by hand-operated gear in 90 seconds. The time of opening and closing these doors, whether the ship is at sea or in port, shall be recorded in the log book.

12.1 Where trunkways or tunnels for access from crew accommodation to the stokehold, for piping, or for any other purpose are carried through main transverse watertight bulkheads, they shall be watertight and in accordance with the requirements of regulation 19. The access to at least one end of each such tunnel or trunkway, if used as a passage at sea, shall be through a trunk extending watertight to a height sufficient to permit access above the margin line. The access to the other end of the trunkway or tunnel may be through a watertight door of the type required by its location in the ship. Such trunkways or tunnels shall not extend through the first subdivision bulkhead abaft the collision bulkhead.

12.2 Where it is proposed to fit tunnels piercing main transverse watertight bulkheads, these shall receive the special consideration of the Administration.

12.3 Where trunkways in connection with refrigerated cargo and ventilation or forced draught trunks are carried through more than one watertight bulkhead, the means of closure at such openings shall be operated by power and be capable of being closed from a central position situated above the bulkhead deck".

Regulation 16

Passenger ships carrying goods vehicles and accompanying personnel

The reference to "regulation 15.12" in paragraph 2 is replaced by reference to "regulation 15.10".

Regulation 21

Bilge pumping arrangements

The following text is inserted after the heading:

"(Paragraphs 1.6 and 2.9 of this regulation apply to ships constructed on or after 1 February 1992)".

The following new paragraph 1.6 is added after paragraph 1.5:

"1.6 Provisions shall be made for the drainage of enclosed cargo spaces situated on the bulkhead deck of a passenger ship and on the freeboard deck of a cargo ship, provided that the Administration may permit the means of drainage to be dispensed with in any particular compartment of any ship or class of ship if it is satisfied that by reason of size or internal subdivision of those spaces the safety of the ship is not thereby impaired.

1.6.1 Where the freeboard to the bulkhead deck or the freeboard deck, respectively, is such that the deck edge is immersed when the ship heels more than 5°, the drainage shall be by means of a sufficient number of scuppers of suitable size discharging directly overboard, fitted in accordance with the requirements of regulation 17 in the case of a passenger ship and the requirements for scuppers, inlets and discharges of the International Convention on Load Lines in force in the case of a cargo ship.

1.6.2 Where the freeboard is such that the edge of the bulkhead deck or the edge of the freeboard deck, respectively, is immersed when the ship heels 5° or less, the drainage of the enclosed cargo spaces on the bulkhead deck or on the freeboard deck, respectively, shall be led to a suitable space, or spaces, of adequate capacity, having a high water level alarm and provided with suitable arrangements for discharge overboard. In addition it shall be ensured that:

.1 the number, size and disposition of the scuppers are such as to prevent unreasonable accumulation of free water;

.2 the pumping arrangements required by this regulation for passenger ships or cargo ships, as applicable, take account of the requirements for any fixed pressure water-spraying fire-extinguishing system;

.3 water contaminated with petrol or other dangerous substances is not drained to machinery spaces or other spaces where sources of ignition may be present; and

.4 where the enclosed cargo space is protected by a carbon dioxide fire-extinguishing system the deck scuppers are fitted with means to prevent the escape of the smothering gas".

The definition of "D" in paragraph 2.9 is replaced by the following:

"D is the moulded depth of the ship to the bulkhead deck (metres) provided that, in a ship having an enclosed cargo space on the bulkhead deck which is internally drained in accordance with the requirements of paragraph 1.6.2 and which extends for the full length of the ship, D shall be measured to the next deck above the bulkhead deck. Where the enclosed cargo spaces cover a lesser length, D shall be taken as the moulded depth to the bulkhead deck plus lh/L where l and h are the aggregate length and height respectively of the enclosed cargo spaces (metres)".

Regulation 23-1

The following new regulation 23-1 is added after regulation 23:

"Damage control in dry cargo ships

(This regulation applies to ships constructed on or after 1 February 1992)

1 There shall be permanently exhibited or readily available on the navigating bridge, for the guidance of the officer in charge of the ship, a plan showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof, and the arrangements for the correction of any list due to flooding. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.

2 Indicators shall be provided for all sliding doors and for hinged doors in watertight bulkheads. Indication showing whether the doors are open or closed shall be given on the navigating bridge. In addition, shell doors and other openings which, in the opinion of the Administration, could lead to major flooding if left open or not properly secured, shall be provided with such indicators.

3.1 General precautions shall consist of a listing of equipment, conditions and operational procedures, considered by the Administration to be necessary to maintain watertight integrity under normal ship operations.

3.2 Specific precautions shall consist of a listing of elements (i.e. closures, security of cargo, sounding of alarms, etc.) considered by the Administration to be vital to the survival of the ship and its crew".

Regulation 42

Emergency sources of electrical power in passenger ships

The following text is inserted after the heading:

"(Paragraphs 2.6.1 and 4.2 of this regulation apply to ships constructed on or after 1 February 1992)".

The second sentence in paragraph 2.6.1 is deleted.

The existing text of paragraph 4.2 is replaced by the following:

"4.2 Power to operate the watertight doors, as required by regulation 15.7.3.3, but not necessarily all of them simultaneously, unless an independent temporary source of stored energy is provided. Power to the control, indication and alarm circuits as required by regulation 15.7.2 for half an hour".

CHAPTER II-2

CONSTRUCTION - FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

Regulation 4

Fire pumps, fire mains, hydrants and hoses

The following text is inserted after the heading:

"(Paragraph 3.3.2.5 of this regulation applies to ships constructed on or after 1 February 1992)".

The existing text of paragraph 3.3.2.5 is replaced by the following:

"2.5 The total suction head and the net positive suction head of the pump shall be such that the requirements of paragraphs 3.3.2, 3.3.2.1, 3.3.2.2 and 4.2 of this regulation shall be obtained under all conditions of list, trim, roll and pitch likely to be encountered in service".

In paragraph 7.1 between "of" and "material" in the first line the word "non-perishable" is inserted.

In paragraph 7.1, the following new sentence is inserted after the first sentence:

"Fire hoses of non-perishable material shall be provided in ships constructed on or after 1 February 1992, and on ships constructed before 1 February 1992 when the existing fire hoses are replaced".

Regulation 13-1

The following new regulation 13-1 is added after regulation 13:

"Sample extraction smoke detection systems

(This regulation applies to ships constructed on or after 1 February 1992)

1 General requirements

1.1 Wherever in the text of this regulation the word "system" appears, it shall mean "sample extraction smoke detection system".

1.2 Any required system shall be capable of continuous operation at all times except that systems operating on a sequential scanning principle may be accepted, provided that the interval between scanning the same position twice gives an overall response time to the satisfaction of the Administration.

1.3 Power supplies necessary for the operation of the system shall be monitored for loss of power. Any loss of power shall initiate a visual and audible signal at the control panel and the navigating bridge which shall be distinct from a signal indicating smoke detection.

1.4 An alternative power supply for the electrical equipment used in the operation of the system shall be provided.

1.5 The control panel shall be located on the navigating bridge or in the main fire control station.

1.6 The detection of smoke or other products of combustion shall initiate a visual and audible signal at the control panel and the navigating bridge.

1.7 Clear information shall be displayed on or adjacent to the control panel designating the spaces covered.

1.8 The sampling pipe arrangements shall be such that the location of the fire can be readily identified.

1.9 Suitable instructions and component spares shall be provided for the testing and maintenance of the system.

1.10 The functioning of the system shall be periodically tested to the satisfaction of the Administration. The system shall be of a type that can be tested for correct operation and restored to normal surveillance without the renewal of any component.

1.11 The system shall be designed, constructed and installed so as to prevent the leakage of any toxic or flammable substances or fire-extinguishing media into any accommodation and service space, control station or machinery space.

2 Installation requirements

2.1 At least one smoke accumulator shall be located in every enclosed space for which smoke detection is required. However, where a space is designed to carry oil or refrigerated cargo alternatively with cargoes for which a smoke sampling system is required, means may be provided to isolate the smoke accumulators in such compartments for the system. Such means shall be to the satisfaction of the Administration.

2.2 Smoke accumulators shall be located for optimum performance and shall be spaced so that no part of the overhead deck area is more than 12 m measured horizontally from an accumulator. Where systems are used in spaces which may be mechanically ventilated, the position of the smoke accumulators shall be considered having regard to the effects of ventilation.

2.3 Smoke accumulators shall be positioned where impact or physical damage is unlikely to occur.

2.4 Not more than four accumulators shall be connected to each sampling point.

2.5 Smoke accumulators from more than one enclosed space shall not be connected to the same sampling point.

2.6 Sampling pipes shall be self-draining and suitably protected from impact or damage from cargo working.

3 Design requirements

3.1 The system and equipment shall be suitably designed to withstand supply voltage variations and transients, ambient temperature changes, vibration, humidity, shock, impact and corrosion normally encountered in ships and to avoid the possibility of ignition of flammable gas air mixture.

3.2 The sensing unit shall be certified to operate before the smoke density within the sensing chamber exceeds 6.65% obscuration per metre.

3.3 Duplicate sample extraction fans shall be provided. The fans shall be of sufficient capacity to operate with the normal conditions or ventilation in the protected area and shall give an overall response time to the satisfaction of the Administration.

3.4 The control panel shall permit observation of smoke in the individual sampling pipe.

3.5 Means shall be provided to monitor the airflow through the sampling pipes so designed as to ensure that as far as practicable equal quantities are extracted from each interconnected accumulator.

3.6 Sampling pipes shall be a minimum of 12 mm internal diameter except when used in conjunction with fixed gas fire-extinguishing systems when the minimum size of pipe should be sufficient to permit the fire-extinguishing gas to be discharged within the appropriate time.

3.7 Sampling pipes shall be provided with an arrangement for periodically purging with compressed air".

Regulation 15

Arrangements for oil fuel, lubricating oil and other flammable oils

The following text is inserted after the heading:

"(Paragraphs 2.6 and 3 of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of paragraph 2.6 is replaced by the following:

".6 Safe and efficient means of ascertaining the amount of oil fuel contained in any oil fuel tank shall be provided.

.6.1 Where sounding pipes are used, they shall not terminate in any space where the risk of ignition of spillage from the sounding pipe might arise. In particular, they shall not terminate in passenger or crew spaces. As a general rule, they shall not terminate in machinery spaces. However, where the Administration considers that these latter requirements are impracticable, it may permit termination of sounding pipes in machinery spaces on condition that all the following requirements are met:

.6.1.1 in addition, an oil-level gauge is provided meeting the requirements of subparagraph .6.2;

.6.1.2 the sounding pipes terminate in locations remote from ignition hazards unless precautions are taken such as the fitting of effective screens to prevent the oil fuel in the case of spillage through the terminations of the sounding pipes from coming into contact with a source of ignition;

.6.1.3 the termination of sounding pipes are fitted with self-closing blanking devices and with a small-diameter self-closing control cock located below the blanking device for the purpose of ascertaining before the blanking device is opened that oil fuel is not present. Provision shall be made so as to ensure that any spillage of oil fuel through the control cock involves no ignition hazard.

.6.2 Other oil-level gauges may be used in place of sounding pipes. Such means, like the means provided in subparagraph .6.1.1, are subject to the following conditions:

.6.2.1 in passenger ships, such means shall not require penetration below the top of the tank and their failure or overfilling of the tanks shall not permit release of fuel;

.6.2.2 in cargo ships, the failure of such means or overfilling of the tank shall not permit release of fuel into the space. The use of cylindrical gauge glasses is prohibited. The Administration may permit the use of oil-level gauges with flat glasses and self-closing valves between the gauges and fuel tanks.

6.3 Means prescribed in .6.2.1 or .6.2.2 which are acceptable to the Administration shall be maintained in the proper condition to ensure their continued accurate functioning in service".

The existing text of paragraph 3 is replaced by the following:

"3 The arrangements for the storage, distribution and utilization of oil used in pressure lubrication systems shall be such as to ensure the safety of the ship and persons on board. The arrangements made in machinery spaces of category A, and whenever practicable in other machinery spaces, shall at least comply with the provisions of paragraphs 2.1, 2.4, 2.5, 2.6, 2.7 and 2.8, except that:

.1 this does not preclude the use of sight-flow glasses in lubricating systems provided that they are shown by test to have a suitable degree of fire resistance;

.2 sounding pipes may be authorized in machinery spaces; the requirements of paragraphs 2.6.1.1 and 2.6.1.3 need not be applied on condition that the sounding pipes are fitted with appropriate means of closure".

Regulation 18

Miscellaneous items

The following text is inserted after the heading:

"(Paragraphs 2.4 and 8 of this regulation apply to ships constructed on or after 1 February 1992. Paragraph 7 of this regulation applies to all ships)".

The following new paragraph 2.4 is added after paragraph 2.3:

"2.4 For the protection of cargo tanks carrying crude oil and petroleum products having a flashpoint not exceeding 60°C, materials readily rendered ineffective by heat shall not be used for valves, fittings, tank opening covers, cargo vent piping, and cargo piping so as to prevent the spread of fire to the cargo".

The following new paragraphs 7 and 8 are added after paragraph 6:

"7 Paint lockers and flammable liquid lockers shall be protected by an appropriate fire-extinguishing arrangement approved by the Administration.

8 Helicopter decks shall be of a steel or steel equivalent fire-resistant construction. If the space below the helicopter deck is a high fire risk space, the insulation standard shall be to the satisfaction of the Administration. Each helicopter facility shall have an operations manual, including a description and a checklist of safety precautions, procedures, and equipment requirements. If the Administration permits aluminium or other low melting metal construction that is not made equivalent to steel, the following provisions shall be satisfied:

.1 If the platform is cantilevered over the side of the ship, after each fire on the ship or on the platform, the platform shall undergo a structural analysis to determine its suitability for further use.

.2 If the platform is located above the ship's deckhouse or similar structure, the following conditions shall be satisfied:

.2.1 the deckhouse top and bulkheads under the platform shall have no openings;

.2.2 all windows under the platform shall be provided with steel shutters;

.2.3 the required fire-fighting equipment shall be to the satisfaction of the Administration;

.2.4 after each fire on the platform or in close proximity, the platform shall undergo a structural analysis to determine its suitability for further use".

Regulation 26

Fire integrity of bulkheads and decks in ships carrying more than 36 passengers

The following text is inserted after the heading:

"(Paragraphs 2.2(7) and 2.2(13) of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of the third sentence in paragraph 2.2(7) is replaced by the following:

"Isolated lockers and small store-rooms in accommodation spaces having areas less than 4 m^2 (in which flammable liquids are not stowed)".

The following sentence is added at the end of paragraph 2.2(13):

"Lockers and store-rooms having areas greater than 4 m^2, other than those spaces that have provisions for the storage of flammable liquids".

Regulation 27

Fire integrity of bulkheads and decks in ships carrying not more than 36 passengers

The following text is inserted after the heading:

"(Paragraph 2.(5) and 2.(9) of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of paragraphs 2.(5) and 2.(9) are replaced by the following:

"(5) Service spaces (low risk)

Lockers and store-rooms not having provisions for the storage of flammable liquids and having areas less than 4 m^2 and drying rooms and laundries".

"(9) Service spaces (high risk)

Galleys, pantries containing cooking appliances, paint and lamp rooms, lockers and store-rooms having areas of 4 m^2 or more, spaces for the storage of flammable liquids, and workshops other than those forming part of the machinery spaces".

Regulation 38

Protection of cargo spaces, other than special category spaces, intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion

The following text is inserted after the heading:

"(Paragraph 1 of this regulation applies to ships constructed on or after 1 February 1992)".

The existing text of paragraph 1 is replaced by the following:

"1 Fixed Fire Detection

There shall be provided a fixed fire detection and fire alarm system complying with the requirements of regulation 13 or a sample extraction smoke detection system complying with the requirements of regulation 13-1. The design and arrangements of this system shall be considered in conjunction with the ventilation requirements referred to in paragraph 3".

Regulation 40

Fire patrols, detection, alarms and public address systems

The following text is inserted after the heading:

"(Paragraph 2 of this regulation applies to ships constructed on or after 1 February 1992)".

The existing text of paragraph 2 is replaced by the following:

"2 A fixed fire detection and fire alarm system complying with the requirements of regulation 13 or a sample extraction smoke detection system complying with the requirements of regulation 13-1 shall be provided in any cargo space which, in the opinion of the Administration, is not accessible, except where it is shown to the satisfaction of the Administration that the ship is engaged on voyages of such short duration that it would be unreasonable to apply this requirement".

Regulation 44

Fire integrity of bulkheads and decks

The following text is inserted after the heading:

"(Paragraphs 2.(5) and 2.(9) of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of paragraphs 2.(5) and 2.(9) is replaced by the following:

"(5) Service spaces (low risk)

Lockers and store-rooms not having provisions for the storage of flammable liquids and having areas less than 4 m^2 and drying rooms and laundries".

"(9) Service spaces (high risk)

Galleys, pantries containing cooking appliances, paint and lamp rooms, lockers and store-rooms having areas of 4 m^2 or more, spaces for the storage of flammable liquids, and workshops other than those forming part of the machinery spaces".

Regulation 50

Details of construction

The following text is inserted after the heading:

"(Paragraphs 3.2 and 3.3 of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of paragraph 3.2 is replaced by the following:

"3.2 Where non-combustible bulkheads, linings and ceilings are fitted in accommodation and service spaces they may have a combustible veneer with a calorific value not exceeding 45 MJ/m^2 of the area for the thickness used".

The following new paragraph 3.3 is added after paragraph 3.2:

"3.3 The total volume of combustible facings, mouldings, decorations and veneers in any accommodation and service space bounded by non-combustible bulkheads, ceilings and linings shall not exceed a volume equivalent to a 2.5 mm veneer on the combined area of the walls and ceilings".

The existing paragraph 3.3 is renumbered paragraph 3.4.

Regulation 53

Fire protection arrangements in cargo spaces

The following text is inserted after the heading:

(Paragraphs 2.1 and 3 of this regulation apply to ships constructed on or after 1 February 1992)".

In paragraph 1.2 the word "and" between "timber" and "non-combustible" in the third line is replaced by ",".

An asterisk is added at the end of paragraph 1.2 and the following text of a footnote is inserted:

"* Reference is made to the Code of Safe Practice for Solid Bulk Cargoes - Emergency Schedule B14, entry for coal".

The existing text of paragraph 2.1 is replaced by the following:

"2.1 There shall be provided a fixed fire detection and fire alarm system complying with the requirements of regulation 13. The fixed fire detection system shall be capable of rapidly detecting the onset of fire. The type of detectors and their spacing and location shall be to the satisfaction of the Administration taking into account the effects of ventilation and other relevant factors. After being installed, the system shall be tested under normal ventilation conditions and shall give an overall response time to the satisfaction of the Administration".

The existing text of paragraph 3 is replaced by the following:

"3 Cargo spaces, other than ro-ro cargo spaces, intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion

Cargo spaces, other than ro-ro spaces intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion shall comply with the requirements of paragraph 2 except that in lieu of the requirements of

paragraph 2.1 a sample extraction smoke detection system complying with the requirements of regulation 13-1 may be permitted and paragraph 2.2.4 need not be complied with".

Regulation 54

Special requirements for ships carrying dangerous goods

The following text is inserted after the heading:

"(Paragraph 2.3 of this regulation applies to ships constructed on or after 1 February 1992)".

The existing text of paragraph 1.1 and footnote is replaced by the following:

"1.1 In addition to complying with the requirements of regulation 53 for cargo ships and with the requirements of regulations 37*, 38 and 39 for passenger ships as appropriate, ship-types and cargo spaces, referred to in paragraph 1.2, intended for the carriage of dangerous goods shall comply with the requirements of this regulation, as appropriate, except when carrying dangerous goods in limited quantities** unless such requirements have already been met by compliance with the requirements elsewhere in this chapter. The types of ships and modes of carriage of dangerous goods are referred to in paragraph 1.2 and in table 54.1, where the numbers appearing in paragraph 1.2 are referred to in the top line. Cargo ships of less than 500 tons gross tonnage constructed on or after 1 February 1992 shall comply with this regulation, but Administrations may reduce the requirements and such reduced requirements shall be recorded in the document of compliance referred to in paragraph 3.

---

* Reference is made to section 17 of the General Introduction to the International Maritime Dangerous Goods Code (IMDG Code) for operational measures in association with the requirements of this regulation.

** Reference is made to section 18 of the General Introduction to the International Maritime Dangerous Goods Code (IMDG Code) for a definition of the term 'limited quantities'".

The existing text of paragraph 2.3 is replaced by the following:

"2.3 Detection system

Ro-ro cargo spaces shall be fitted with a fixed fire detection and fire alarm system complying with the requirements of regulation 13. All other types of cargo spaces shall be fitted with either a fixed fire detection and fire alarm system complying with the requirements of regulation 13 or a sample extraction smoke detection system complying with the requirements of regulation 13-1. If a sample extraction smoke detection system is fitted, particular attention shall be made to regulation 13-1.1.11 in order to prevent the leakage of toxic fumes into occupied areas".

Regulation 55

Application

The existing text of paragraph 5 is replaced by the following:

"5 The requirements for inert gas systems of regulation 60 need not be applied to:

.1 chemical tankers constructed before, on or after 1 July 1986 when carrying cargoes described in paragraph 1, provided that they comply with the requirements for inert gas systems on chemical tankers developed by the Organization*; or

.2 chemical tankers constructed before 1 July 1986, when carrying crude oil or petroleum products, provided that they comply with the requirements for inert gas systems on chemical tankers carrying petroleum products developed by the Organization**; or

.3 gas carriers constructed before, on or after 1 July 1986 when carrying cargoes described in paragraph 1, provided that they are fitted with cargo tank inerting arrangements equivalent to those specified in paragraph 5.1 or 5.2; or

.4 chemical tankers and gas carriers when carrying flammable cargoes other than crude oil or petroleum products such as cargoes listed in chapters VI and VII of the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk or chapters 17 and 18 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk:

.4.1 if constructed before 1 July 1986; or

.4.2 if constructed on or after 1 July 1986, provided that the capacity of tanks used for their carriage does not exceed 3,000 m^3 and the individual nozzle capacities of tank washing machines do not exceed 17.5 m^3/h and the total combined throughput from the number of machines in use in a cargo tank at any one time does not exceed 110 m^3/h.

---

* Reference is made to Regulation for Inert Gas Systems on Chemical Tankers adopted by the Organization by resolution A.567(14).

** Reference is made to Interim Regulation for Inert Gas Systems on Chemical Tankers Carrying Petroleum Products, adopted by the Organization by resolution A.473(XII)".

Regulation 56

Location and separation of spaces

The existing text of this regulation is replaced by the following:

"(This regulation applies to ships constructed on or after 1 February 1992)

1 Machinery spaces shall be positioned aft of cargo tanks and slop tanks; they shall also be situated aft of cargo pump-rooms and cofferdams, but not necessarily aft of the oil fuel bunker tanks. Any machinery space shall be

isolated from cargo tanks and slop tanks by cofferdams, cargo pump-rooms, oil fuel bunker tanks or ballast tanks. Pump-rooms containing pumps and their accessories for ballasting those spaces situated adjacent to cargo tanks and slop tanks and pumps for oil fuel transfer shall be considered as equivalent to a cargo pump-room within the context of this regulation, provided that such pump-rooms have the same safety standard as that required for cargo pump-rooms. However, the lower portion of the pump-room may be recessed into machinery spaces of category A to accommodate pumps, provided that the deck head of the recess is in general not more than one third of the moulded depth above the keel, except that in the case of ships of not more than 25,000 tonnes deadweight, where it can be demonstrated that for reasons of access and satisfactory piping arrangements this is impracticable, the Administration may permit a recess in excess of such height, but not exceeding one half of the moulded depth above the keel.

2 Accommodation spaces, main cargo control stations, control stations and service spaces (excluding isolated cargo handling gear lockers) shall be positioned aft of all cargo tanks, slop tanks, and spaces which isolate cargo or slop tanks from machinery spaces but not necessarily aft of the oil fuel bunker tanks and ballast tanks, but shall be arranged in such a way that a single failure of a deck or bulkhead shall not permit the entry of gas or fumes from the cargo tanks into an accommodation space, main cargo control stations, control station, or service spaces. A recess provided in accordance with paragraph 1 need not be taken into account when the position of these spaces is being determined.

3 However, where deemed necessary, the Administration may permit accommodation spaces, main cargo control stations, control stations, and service spaces forward of the cargo tanks, slop tanks and spaces which isolate cargo and slop tanks from machinery spaces, but not necessarily forward of oil fuel bunker tanks or ballast tanks. Machinery spaces, other than those of category A, may be permitted forward of the cargo tanks and slop tanks provided they are isolated from the cargo tanks and slop tanks by cofferdams, cargo pump-rooms, oil fuel bunker tanks or ballast tanks. All of the above spaces shall be subject to an equivalent standard of safety and appropriate

availability of fire-extinguishing arrangements being provided to the satisfaction of the Administration. Accommodation spaces, main cargo control spaces, control stations and service spaces shall be arranged in such a way that a single failure of a deck or bulkhead shall not permit the entry of gas or fumes from the cargo tanks into such spaces. In addition, where deemed necessary for the safety or navigation of the ship, the Administration may permit machinery spaces containing internal combustion machinery not being main propulsion machinery having an output greater than 375 kW to be located forward of the cargo area provided the arrangements are in accordance with the provisions of this paragraph.

4 In combination carriers only:

.1 The slop tanks shall be surrounded by cofferdams except where the boundaries of the slop tanks where slop may be carried on dry cargo voyages are the hull, main cargo deck, cargo pump-room bulkhead or oil fuel bunker tank. These cofferdams shall not be open to a double bottom, pipe tunnel, pump-room or other enclosed space. Means shall be provided for filling the cofferdams with water and for draining them. Where the boundary of a slop tank is the cargo pump-room bulkhead the pump-room shall not be open to the double bottom, pipe tunnel or other enclosed space; however, openings provided with gastight bolted covers may be permitted.

.2 Means shall be provided for isolating the piping connecting the pump-room with the slop tanks referred to in paragraph 4.1. The means of isolation shall consist of a valve followed by a spectacle flange or a spool piece with appropriate blank flanges. This arrangement shall be located adjacent to the slop tanks, but where this is unreasonable or impracticable, it may be located within the pump-room directly after the piping penetrates the bulkhead. A separate pumping and piping arrangement incorporating a manifold shall be provided for discharging the contents of the slop tanks directly to the open deck for disposal to shore reception facilities when the ship is in the dry cargo mode.

.3 Hatches and tank cleaning openings to slop tanks shall only be permitted on the open deck and shall be fitted with closing arrangements. Except where they consist of bolted plates with bolts at watertight spacing, these closing arrangements shall be provided with locking arrangements which shall be under the control of the responsible ship's officer.

.4 Where cargo wing tanks are provided, cargo oil lines below deck shall be installed inside these tanks. However, the Administration may permit cargo oil lines to be placed in special ducts which shall be capable of being adequately cleaned and ventilated and be to the satisfaction of the Administration. Where cargo wing tanks are not provided cargo oil lines below deck shall be placed in special ducts.

5 Where the fitting of a navigation position above the cargo area is shown to be necessary, it shall be for navigation purposes only and it shall be separated from the cargo tank deck by means of an open space with a height of at least 2 m. The fire protection of such a navigation position shall in addition be as required for control spaces in regulation 58.1 and 58.2 and other provisions, as applicable, of this part.

6 Means shall be provided to keep deck spills away from the accommodation and service areas. This may be accomplished by provision of a permanent continuous coaming of a suitable height extending from side to side. Special consideration shall be given to the arrangements associated with stern loading.

7 Exterior boundaries of superstructures and deckhouses enclosing accommodation and including any overhanging decks which support such accommodation, shall be insulated to "A-60" standard for the whole of the portions which face the cargo area and on the outward sides for a distance of 3 m from the end boundary facing the cargo area. In the case of the sides of those superstructures and deckhouses, such insulation shall be carried as high as is deemed necessary by the Administration.

8.1 Except as permitted in paragraph 8.2 below, access doors, air inlets and openings to accommodation spaces, service spaces, control stations and machinery spaces shall not face the cargo area. They shall be located on the

transverse bulkhead not facing the cargo area or on the outboard side of the superstructure or deckhouse at a distance of at least 4% of the length of the ship but not less than 3 m from the end of the superstructure or deckhouse facing the cargo area. This distance need not exceed 5 m.

8.2 The Administration may permit access doors in boundary bulkheads facing the cargo area or within the 5 m limits specified in paragraph 8.1, to main cargo control stations and to such service spaces as provision rooms, store rooms and lockers, provided they do not give access directly or indirectly, to any other space containing or provided for accommodation, control stations or service spaces such as galleys, pantries or workshops, or similar spaces containing sources of vapour ignition. The boundary of such a space shall be insulated to "A-60" standard, with the exception of the boundary facing the cargo area. Bolted plates for the removal of machinery may be fitted within the limits specified in paragraph 8.1. Wheelhouse doors and wheelhouse windows may be located within the limits specified in paragraph 8.1 so long as they are designed to ensure that the wheelhouse can be made rapidly and efficiently gas and vapour tight.

8.3 Windows and sidescuttles facing the cargo area and on the sides of the superstructures and deckhouses within the limits specified in paragraph 8.1 shall be of the fixed (non-opening) type. Such windows and sidescuttles in the first tier on the main deck shall be fitted with inside covers of steel or other equivalent material".

Regulation 58

Fire integrity of bulkheads and decks

The following text is inserted after the heading:

"(Paragraph 2.(5) and 2.(9) of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of paragraphs 2.(5) and 2.(9) is replaced by the following:

"(5) Service spaces (low risk)

Lockers and store-rooms not having provision for the storage of flammable liquids and having areas less than 4 m^2 and drying rooms and laundries".

"(9) Service spaces (high risk)

Galleys, pantries containing cooking appliances, paint and lamp rooms, lockers and store-rooms having areas of 4 m^2 or more, spaces for the storage of flammable liquids, and workshops other than those forming part of the machinery spaces".

Regulation 59

Venting, purging, gas-freeing and ventilation

The following text is inserted after the heading:

"(Paragraph 2 of this regulation applies to ships constructed on or after 1 February 1992)".

The existing text of paragraph 2 is replaced by the following:

"2 Cargo tank purging and/or gas-freeing*

Arrangements for purging and/or gas-freeing shall be such as to minimize the hazards due to the dispersal of flammable vapours in the atmosphere and to flammable mixtures in a cargo tank. Accordingly:

.1 When the ship is provided with an inert gas system, the cargo tanks shall first be purged in accordance with the provisions of regulation 62.13 until the concentration of hydrocarbon vapours in the cargo tanks has been reduced to less than 2% by volume. Thereafter, gas-freeing may take place at the cargo tank deck level.

.2 When the ship is not provided with an inert gas system, the operation shall be such that the flammable vapour is discharged initially:

.2.1 through the vent outlets as specified in paragraph 1.9; or

.2.2 through outlets at least 2 m above the cargo tank deck level with a vertical efflux velocity of at least 30 m/sec maintained during the gas-freeing operation; or

.2.3 through outlets at least 2 m above the cargo tank deck level with a vertical efflux velocity of at least 20 m/sec and which are protected by suitable devices to prevent the passage of flame.

When the flammable vapour concentration at the outlet has been reduced to 30% of the lower flammable limit, gas-freeing may thereafter be continued at cargo tank deck level.

---

* Reference is made to the Revised Standards for the Design, Testing and Locating of Devices to Prevent the Passage of Flame into Cargo Tanks in Tankers (MSC/Circ.373/Rev.1) and to Revised Factors to be taken into Consideration when Designing Cargo Tank Venting and Gas-Freeing Arrangements (MSC/Circ.450/Rev.1)".

Regulation 62

Inert gas systems

The following text is inserted after the heading:

"(Paragraphs 19.1 and 19.2 of this regulation apply to ships constructed on or after 1 February 1992)".

The existing text of the first line of paragraph 19.1 is replaced by the following:

"For inert gas systems of both the flue, gas type and the inert gas generator type, audible and visual alarms shall be provided to indicate:".

The existing text of the first three lines of paragraph 19.2 is replaced by the following:

"For inert gas systems of the inert gas generator type, additional visual and audible alarms shall be provided to indicate;".

CHAPTER III

LIFE-SAVING APPLIANCES AND ARRANGEMENTS

Regulation 41

General requirements for lifeboats

The existing text of paragraph 8.18 is replaced by the following:

"One copy of the life-saving signals referred to in regulation V/16 on a waterproof card or in a waterproof container;".

Regulation 48

Launching and embarkation appliances

For the existing text of paragraph 1.4 "o" is replaced by "y" (Spanish text only).

CHAPTER IV

Regulation 13

Radiotelegraph installations for fitting in motor lifeboats

The existing title is replaced by "Radiotelegraph installations for lifeboats".

In paragraph (a), first line, the existing words "Regulation 14 of Chapter III" are replaced by "regulation III/6.2.2".

In paragraph (h), second line, the existing words "Regulation 14 of Chapter III" are replaced by "regulation III/41.8.29".

Regulation 14

Portable radio apparatus for survival craft

In paragraph (a), first line, the existing words "Regulation 13 of Chapter III" are replaced by "regulation III/6.2.1".

CHAPTER V

SAFETY OF NAVIGATION

Regulation 3

Information required in danger messages

The reference to "Greenwich Mean Time" in subparagraph (a)(iii), (b)(ii) and (e)(i) is replaced by reference to "Universal Co-ordinated Time".

The references to "GMT" under "Examples" is replaced by "UTC".

Regulation 9

Misuse of distress signals

The existing text of this regulation is replaced by the following:

"The use of an international distress signal, except for the purpose of indicating that a ship, aircraft or person is in distress, and the use of any signal which may be confused with an international distress signal, are prohibited".

Regulation 12

Shipborne navigational equipment

The existing text of paragraph (f) is replaced by the following:

"(f) Ships with emergency steering positions shall at least be provided with a telephone or other means of communication for relaying heading information to such positions. In addition, ships of 500 tons gross tonnage and upwards constructed on or after 1 February 1992, shall be provided with arrangements for supplying visual compass readings to the emergency steering position".

Regulation 13

Manning

The existing text of regulation V/13 is renumbered as paragraph (a).

The following new paragraph (b) is added:

"(b) Every ship to which chapter I of this Convention applies shall be provided with an appropriate safe manning document or equivalent issued by the Administration as evidence of the minimum safe manning considered necessary to comply with the provisions of paragraph (a)".

Regulation 16

Life-saving signals

The existing text of this regulation is replaced by the following:

"Life-saving signals* shall be used by life-saving stations, maritime rescue units and aircraft engaged in search and rescue operations when communicating with ships or persons in distress or to direct ships, and by ships or persons in distress when communicating with life-saving stations, maritime rescue units and aircraft engaged in search and rescue operations. An illustrated table describing the life-saving signals shall be readily available to the officer of the watch of every ship to which this chapter applies.

---

* Such life-saving signals are described in the Merchant Ship Search and Rescue Manual (MERSAR) (resolution A.229(VII), as amended), the IMO Search and Rescue Manual (IMOSAR) (resolution A.439(XI), as amended) and illustrated in the International Code of Signals as amended pursuant to resolution A.80(IV)".

CHAPTER VII

CARRIAGE OF DANGEROUS GOODS

Regulation 7

The existing text of regulation is replaced by the following:

"Explosives in passenger ships*

1 Explosives in division 1.4, compatibility group S may be carried in any amount in passenger ships. No other explosives may be carried except any one of the following:

.1 explosive articles for life-saving purposes, if the total net explosives mass of such articles does not exceed 50 kg per ship; or

.2 explosives in compatibility groups C, D and E, if the total net explosives mass does not exceed 10 kg per ship; or

.3 explosive articles in compatibility group G other than those requiring special stowage, if the total net explosives mass does not exceed 10 kg per ship; or

.4 explosive articles in compatibility group B, if the total net explosives mass does not exceed 5 kg per ship.

2 Notwithstanding the provisions of paragraph 1, additional quantitites or types of explosives may be carried in passenger ships in which special safety measures approved by the Administration are taken.

---

* Reference is made to class 1 of the International Maritime Dangerous Goods Code (IMDG Code)".

第 79/2014 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一九九四年五月二十三日透過第MSC.31（63）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第MSC.31（63）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 79/2014

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 23 de Maio de 1994, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.31(63), 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.31(63), 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.31（63）號決議

1994 年 5 月 23 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》關於本委員會的職責的第 28（b）條，

還憶及《1974 年國際海上人命安全公約》（此後稱為“本公約”）關於修正除第 I 章規定外的本公約附件的程序的第 VIII（b）條，

在其第六十三次會議上審議了按本公約第 VIII（b）（i）條提出和分發的本公約修正案，

1. 按照本公約第 VIII（b）（iv）條通過本公約的修正案，其案文載於本決議附件中；

2. 按照本公約第 VIII（b）（vi）（2）（bb）條，決定：

（a） 附件 1 所載修正案在 1995 年 7 月 1 日應被視為已被接受；和

（b） 附件 2 所載修正案在 1998 年 1 月 1 日應被視為已被接受；

除非在這些日期前，多於三分之一的本公約締約政府或合計商船隊不少於世界商船隊總噸位的百分之五十的締約政府已通知反對這些修正案；

3. 請締約政府注意，按照本公約第 VIII（b）（vii）（2）條，在按上述第 2 段接受後：

（a） 附件 1 所載修正案應於 1996 年 1 月 1 日生效；和

（b） 附件 2 所載修正案應於 1998 年 7 月 1 日生效；

4. 要求秘書長按照本公約第 VIII（b）（v）條，將本決議和附件中所載修正案案文的核證副本分發給本公約的所有締約政府；

5. 還要求秘書長將本決議及其附件分發給非屬本公約締約政府的本組織會員。

附件 1

《1974 年國際海上人命安全公約》修正案

第 V/8-1 條 – 船舶報告制度

1 增加新的第 V/8-1 條如下：

“第 8-1 條

船舶報告制度

（a） 船舶報告制度有助於海上人命安全、航行安全和效率和海洋環境保護。船舶報告制度在按本組織根據本條制訂的指南和標準被通過和實施時，應按被通過的每一制度的規定，為所有船舶所使用，或為若干類別的船舶或運輸若干種類的貨物的船舶所使用。

（b） 本組織被確認為制定國際船舶報告制度的指南、標準和規則的唯一國際機構。締約政府應向本組織送交通過船舶報告制度的提案。本組織將整理有關任何通過的船舶報告制度的所有有關資料並分發給各締約政府。

（c） 本條及其有關指南和標準不適用於任何軍艦、海軍輔助船或為締約政府所擁有或經營、其時僅用於政府非商業營運的其他船舶；但鼓勵這些船舶參加按本條通過的船舶報告制度。

（d） 發起建立船舶報告制度的行動是某一政府或某些有關政府的職責。在制訂這種制度時，應考慮到本組織制訂的指南和標準的規定。

（e） 不提交本組織通過的船舶報告制度不必符合本條。但鼓勵實施這種制度的政府在可能時採用本組織制定的指南和標準。締約政府可將這種制度提交本組織認可。

（f） 當兩個或更多政府對一特定區域有共同利益時，他們應根據他們之間的協議制定經協調的船舶報告制度的提案。在審議通過船舶報告制度前，本組織應向在提議的制度涉及區域中有共同利益的那些政府分發該建議的詳情。當經協調的船舶報告制度被通過和建立時，應有統一的程序和運作。

（g） 在船舶報告制度按本條通過後，有關的某一政府或某些政府應採取一切必要措施頒佈有效和有效率的使用該制度所需的任何資料。任何經通過的船舶報告制度應有相互配合的能力和在必要時協助船舶得到資料的能力。這些制度應按照由本組織根據本條制訂的指南和標準進行運作。

（h） 船長應滿足經通過的船舶報告制度的要求，並按各制度規定的要求向主管當局報告所有資料。

（i） 被通過的所有報告制度和為符合這些制度所採取的行動應與國際法相一致，包括與《聯合國海洋法公約》的有關規定相一致。

（j） 本條或其相關指南和標準中沒有任何規定可損害國際法規定的各國政府的權利和義務或國際海峽的法制體制。

（k） 船舶按照通過的船舶報告制度的規定參加該制度，對有關船舶應是免費的。

（l） 本組織應確保：按照本組織制訂的指南和標準對經通過的船舶報告制度進行檢查。”

第 V/15-1 條 – 液貨船的緊急拖帶裝置

2 增加新的第 V/15-1 條如下：

“第 15-1 條

液貨船的緊急拖帶裝置

（a） 就本條而言，液貨船包括第 II-1/2.12 規定的油輪、第 VII/8.2 條規定的化學品船和第 VII/11.2 條規定的氣體運輸船。

（b） 在 1996 年 1 月 1 日或以後建造的、第 II-1/3.21 條規定的載重量不小於 20,000 噸的所有液貨船應在船上的兩端均裝備有緊急拖帶裝置。對 1996 年 1 月 1 日前建造的液貨船，這種裝置應在 1996 年 1 月 1 日後的第一次計劃進乾塢修理時安裝，但不遲於 1999 年 1 月 1 日。拖帶裝置的設計和構造應由主管機關根據本組織制訂的指南核准。”

附件 2

《1974 年國際海上人命安全公約》修正案

第 II-2/15 – 燃油、滑油和其他易燃油類的裝置

1 在標題後加上下述內容：

“（本條第 2.9 至 2.12 款適用於所有船舶）”

2 在現有第 2 款.8 項後加上新的.9 至.12 項如下：

“.9 在高壓燃油泵和燃油噴射器之間的所有外部高壓供油管線應由在高壓管線故障時能容納燃油的有套管的管路系統作出保護。有套管的管子有一外管，高壓燃油管放置在其中，形成永久性組件。有套管的管路系統應包括收集淺漏物的裝置和應提供燃油管故障報警裝置。

.10 在燃油系統發生故障時，可被侵及的、溫度超過 220°C 的所有表面應有絕熱保護。

.11 燃油管線應有屏護或者作出其他保護，以儘可行地避免油類濺落物或油類泄漏物接觸熱表面、進入機器空氣進口或其他點燃源。

.12 在 1998 年 7 月 1 日前建造的船舶應在不遲於 2003 年 7 月 1 日符合第 2.9 至 2.11 款的要求，但輸功率為 375 千瓦或以下的發動機的適當外殼，在燃油噴射泵伺服多個噴射器時，可用作第 2.9 款中的有套管的管路系統的替代物。”

3 在現有第 3 款中“2.7 和 2.8”等詞由“2.7、2.8、2.10 和 2.11”取代。

4 在現有第 4 款中“2.4 和 2.6”等詞由“2.4、2.6、2.10 和 2.11”取代。

5 刪去現有第 5.1 款；第 5.2 和 5.3 款重新編號為 5.1 和 5.2。

第 V/3 條 – 危險電文所需的資料

6 在（b）款中，“熱帶風暴（西印度群島的颶風、中國海的颱風、印度海面的旋風以及其他地區類似性質的風暴）”的短語由“熱帶風暴”取代。

第 V/4 條 – 氣象業務

7 在第（b）（ii）款中，“每日由無線電發出”的短語由“每日由無線電發出兩次”取代。

第 V/22 條 – 駕駛台視界

8 增加新的第 V/22 條如下：

“第 22 條

駕駛台視界

（a） 在 1998 年 7 月 1 日或其後建造的、在第 III/3.10 條中規定的長度不小於 45 米的船舶應符合下述要求：

（i） 航行指揮位置的海面視野，在吃水、縱傾和甲板貨的所有狀況下，從船首正前至每舷 10°內不應有大於兩個船長或 500 米的遮蔽，取其小者。

（ii） 貨物、貨物裝卸設備和操舵室外其他遮蔽物在正橫前造成的遮蔽航行指揮位置的海面視野的任何扇形盲區

不應超過 10°。扇形盲區的總弧度不應超過 20°。扇形盲區間的扇形無遮蔽區應至少為 5°。但在（a）（i）款規定的視野中，每一個扇形盲區不應超過 5°。

（iii） 航行指揮位置的水平視野弧應不小於 225°，即從正前到船舶每舷正橫後不小於 22.5°。

（iv） 每一駕駛室翼台的水平視野弧應至少為 225°，即從對側船首至少 45°起經正前並從正前經船舶同側 180°至正後方。

（v） 主操舵位置的水平視野弧應從正前至船舶每舷至少 60°。

（vi） 從駕駛室翼台應能看見船舷。

（vii） 在駕駛台甲板上方的駕駛台前窗的下緣高度應儘可能低。在任何情況下，該下緣不應遮蔽本條規定的前方視野。

（viii） 駕駛室前窗的上緣應使在駕駛台甲板之上的視高為 1,800 毫米的人，當船舶在大浪中縱搖時，能在航行指揮位置上看到前方的地平線。如主管機關認為視高為 1,800 毫米是不合理和不可行的，則可允許降低視高，但不應小於 1,600 毫米。

（ix） 窗子應符合下述要求：

（1） 駕駛台窗子間的窗框應保持最小數量，並不應安裝在任何工作位置的正前方；

（2） 為幫助避免反射，駕駛台前窗應從垂直平面頂部向外傾斜，其角度不小於10°、不大於25°；

（3） 不應安裝偏振和有色的窗子；和

（4） 在所有時間，不管天氣狀況如何，至少有兩扇駕駛台前窗能提供無遮蔽的視野，此外，視駕駛台的構形而定，還應有一些額外數量的窗戶提供無遮蔽視野。

（b） 1998年7月1日前建造的船舶在可行時應符合（a）（i）和（a）（ii）的要求。但不必要求結構改變或增添額外設備。

（c） 對於非常規設計的船舶，在主管機關認為不能符合本條時，應作出安排以達到儘可能接近本條規定者的視界水平。”

RESOLUTION MSC.31(63)
adopted on 23 May 1994

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,

HAVING CONSIDERED, at its sixty-third 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, the amendments to the Convention, the text of which is set out in the Annexes to the present resolution;

2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that:

(a) the amendments set out in Annex 1 shall be deemed to have been accepted on 1 July 1995; and

(b) the amendments set out in Annex 2 shall be deemed to have been accepted on 1 January 1998;

unless, prior to these dates, more than one third of the Contracting Governments to the Convention, or Contracting Governments the combined merchant fleets of which constitute not less than fifty per cent 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:

(a) the amendments set out in Annex 1 shall enter into force on 1 January 1996; and

(b) the amendments set out in Annex 2 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 Annexes to all Contracting Governments to the Convention;

5. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution and its Annexes to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX 1

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

Regulation V/8-1 - Ship reporting systems

1 The following new regulation V/8-1 is added:

"Regulation 8-1

Ship reporting systems

(a) Ship reporting systems contribute to safety of life at sea, safety and efficiency of navigation, and protection of the marine environment. A ship reporting system, when adopted and implemented in accordance with the guidelines and criteria developed by the Organization pursuant to this regulation, shall be used by all ships, or certain categories of ships or ships carrying certain cargoes, in accordance with the provisions of each system so adopted.

(b) The Organization is recognized as the only international body for developing guidelines, criteria and regulations on an international level for ship reporting systems. Contracting Governments shall refer proposals for the adoption of ship reporting systems to the Organization. The Organization will collate and disseminate to Contracting Governments all relevant information with regard to any adopted ship reporting system.

(c) This regulation and its associated guidelines and criteria do not apply to any warship, naval auxiliary or other vessel owned or operated by a Contracting Government and used, for the time being, only on government non-commercial service; however, such ships are encouraged to participate in ship reporting systems that have been adopted in accordance with this regulation.

(d) The initiation of action for establishing a ship reporting system is the responsibility of the Government or Governments concerned. In developing such systems, provisions of the guidelines and criteria developed by the Organization shall be taken into account.

(e) Ship reporting systems not submitted to the Organization for adoption do not necessarily need to comply with this regulation. However, Governments implementing such systems are encouraged to follow, wherever possible, the guidelines and criteria developed by the Organization. Contracting Governments may submit such systems to the Organization for recognition.

(f) Where two or more Governments have a common interest in a particular area, they should formulate proposals for a co-ordinated ship reporting system on the basis of agreement between them. Before proceeding with a proposal for adoption of a ship reporting system, the Organization shall disseminate details of the proposal to those Governments which have a common interest in the area covered by the proposed system. Where a co-ordinated ship reporting system is adopted and established, it shall have uniform procedures and operations.

(g) After adoption of a ship reporting system in accordance with this regulation, the Government or Governments concerned shall take all measures necessary for the promulgation of any information needed for the efficient and effective use of the system. Any adopted ship reporting system shall have the capability of interaction and the ability to assist ships with information when necessary. Such systems shall be operated in accordance with the guidelines and criteria developed by the Organization pursuant to this regulation.

(h) The master of a ship shall comply with the requirements of adopted ship reporting systems and report to the appropriate authority all information required in accordance with the provisions of each such system.

(i) All adopted ship reporting systems and actions taken to enforce compliance with those systems shall be consistent with international law, including the relevant provisions of the United Nations Convention on the Law of the Sea.

(j) Nothing in this regulation or in its associated guidelines and criteria shall prejudice the rights and duties of Governments under international law, or the legal regime of international straits.

(k) The participation of ships in accordance with the provisions of adopted ship reporting systems shall be free of charge to the ships concerned.

(l) The Organization shall ensure that adopted ship reporting systems are reviewed under the guidelines and criteria developed by the Organization."

Regulation V/15-1 - Emergency towing arrangements on tankers

2 The following new regulation V/15-1 is added:

"Regulation 15-1

Emergency towing arrangements on tankers

(a) For the purpose of this regulation, tankers include oil tankers as defined in regulation II-1/2.12, chemical tankers as defined in regulation VII/8.2 and gas carriers as defined in regulation VII/11.2.

(b) An emergency towing arrangement shall be fitted at both ends on board all tankers of not less than 20,000 tonnes deadweight as defined in regulation II-1/3.21 constructed on or after 1 January 1996. For tankers constructed before 1 January 1996, such an arrangement shall be fitted at the first scheduled dry-docking after 1 January 1996, but not later than 1 January 1999. The design and construction of the towing arrangement shall be approved by the Administration, based on the guidelines developed by the Organization."

ANNEX 2

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

Regulation II-2/15 - Arrangements for oil fuel, lubricating oil and other flammable oils

1 The following text is added after the title:

"(Paragraphs 2.9 to 2.12 of this regulation apply to all ships)"

2 The following new subparagraphs .9 to .12 are added after existing subparagraph .8 of paragraph 2:

".9 All external high pressure fuel delivery lines between the high pressure fuel pumps and fuel injectors shall be protected with a jacketed piping system capable of containing fuel from a high pressure line failure. A jacketed pipe incorporates an outer pipe into which the high pressure fuel pipe is placed forming a permanent assembly. The jacketed piping system shall include a means for collection of leakages and arrangements shall be provided for an alarm to be given of a fuel line failure.

.10 All surfaces with temperatures above 220°C which may be impinged as a result of a fuel system failure shall be properly insulated.

.11 Oil fuel lines shall be screened or otherwise suitably protected to avoid as far as practicable oil spray or oil leakages onto hot surfaces, into machinery air intakes, or other sources of ignition. The number of joints in such piping systems shall be kept to a minimum.

.12 Ships constructed before 1 July 1998 shall comply with the requirements of paragraphs 2.9 to 2.11 not later than 1 July 2003, except that a suitable enclosure on engines having an output of 375 kW or less having fuel injection pumps serving more than one injector may be used as an alternative to the jacketed piping system in paragraph 2.9."

3 The words "2.7 and 2.8" in the existing paragraph 3 are replaced by "2.7, 2.8, 2.10 and 2.11".

4 The words "2.4 and 2.6" in the existing paragraph 4 are replaced by "2.4, 2.6, 2.10 and 2.11".

5 The existing paragraph 5.1 is deleted, and paragraphs 5.2 and 5.3 are renumbered 5.1 and 5.2.

Regulation V/3 - Information required in danger messages

6 In paragraph (b), the phrase "Tropical storms (hurricanes in the West Indies, typhoons in the China Sea, cyclones in Indian waters and storms of a similar nature in other regions)" is replaced by "Tropical storms".

Regulation V/4 - Meteorological services

7 In paragraph (b)(ii), the phrase "To issue daily, by radio" is replaced by "To issue twice daily, by radio".

Regulation V/22 - Navigation bridge visibility

8 The following new regulation V/22 is added:

"Regulation 22

Navigation bridge visibility

(a) Ships of not less than 45 m in length as defined in regulation III/3.10, constructed on or after 1 July 1998, shall meet the following requirements:

(i) The view of the sea surface from the conning position shall not be obscured by more than two ship lengths, or 500 m, whichever is the less, forward of the bow to 10° on either side under all conditions of draught, trim and deck cargo.

(ii) No blind sector caused by cargo, cargo gear or other obstructions outside of the wheelhouse forward of the beam which obstructs the view of the sea surface as seen from the conning position, shall exceed 10°. The total arc of blind sectors shall not exceed 20°. The clear sectors between blind sectors shall be at least 5°. However, in the view described in paragraph (a)(i), each individual blind sector shall not exceed 5°.

(iii) The horizontal field of vision from the conning position shall extend over an arc of not less than 225°, that is from right ahead to not less than 22.5° abaft the beam on either side of the ship.

(iv) From each bridge wing the horizontal field of vision shall extend over an arc of at least 225°, that is from at least 45° on the opposite bow through right ahead and then from right ahead to right astern through 180° on the same side of the ship.

(v) From the main steering position the horizontal field of vision shall extend over an arc from right ahead to at least 60° on each side of the ship.

(vi) The ship's side shall be visible from the bridge wing.

(vii) The height of the lower edge of the navigation bridge front windows above the bridge deck shall be kept as low as possible. In no case shall the lower edge present an obstruction to the forward view as described in this regulation.

(viii) The upper edge of the navigation bridge front windows shall allow a forward view of the horizon, for a person with a height of eye of 1,800 mm above the bridge deck at the conning position, when the ship is pitching in heavy seas. The Administration, if satisfied that a 1,800 mm height of eye is unreasonable and impractical, may allow reduction of the height of eye but not to less than 1,600 mm.

(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第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_S）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 總噸的貨船的每一弦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鉤可達到的範圍內，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 每一海上撤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撤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 在惡劣氣侯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。該救生筏可以是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，海上撤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撤離系統進行維修：

.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僅僱佣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侯航區航行，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應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 一直從事溫暖氣侯航區航行，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 一直從事溫暖氣侯航區航行，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，必要時可利用艇艏纜。

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、閥門、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:

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

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:

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

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^2 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 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 I/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^2 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 Liferafts

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 capsize.

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."

第 81/2014 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；

公約締約政府會議於一九九七年十一月二十七日透過決議1通過了公約附件修正案；

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公約締約政府會議決議1的中文及英文文本。

二零一四年十月三十日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 81/2014

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 27 de Novembro de 1997, a Conferência dos Governos Contratantes da Convenção, através da resolução n.º 1, adoptou emendas ao Anexo da 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 n.º 1 da Conferência dos Governos Contratantes, que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 30 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

《1974 年國際海上人命安全公約》

締約政府會議決議 1

1997 年 11 月 27 日通過

通過《1974 年國際海上人命安全公約》

附件修正案

會議，

憶及《1974 年國際海上人命安全公約》（以下簡稱“本公約”）關於由締約政府會議修正本公約的程序的第 VIII（c）條，

注意到國際海事組織（海事組織）大會通過的關於固體散貨船安全的第 A.713（17）號決議和第 A.797（19）號決議，

深切地關注固體散貨船舶不斷滅失，有時甚至不知蹤跡，和所引起的人員生命的重大損失，

認識到進一步改進固體散貨船設計、設備和操作的各方面安全標準以避免重新引起此類事故的緊迫必要性，

審議了提議並向海事組織所有會員和本公約所有締約政府散發的本公約附件修正案，

1. 按照本公約第 VIII（c）（ii）條，**通過**本公約附件的修正案，其條文載於本決議的附件中；

2. 按照本公約第 VIII（b）（vi）（2）（bb）條，**決定**本修正案應於 1999 年 1 月 1 日視為已被接受，除非在該日期前超過三分之一的本公約締約政府或其合計的商船隊不少於世界商船隊總噸位百分之五十的締約政府通知海事組織秘書長其反對該修正案；

3. **請**締約政府注意，按照本公約第 VIII（b）（vii）（2）條，本修正案應在其按照上述第 2 款被接受後於 1999 年 7 月 1 日生效。

附件

《1974 年國際海上人命安全公約》

附件的修正案

在現有第 XI 章後增加下列新第 XII 章：

“第 XII 章—散貨船補充安全措施

第 1 條

定義

就本章而言：

1. “散貨船”係指如第 IX/1.6 條中所定義的散貨船。

2. “單層舷側船殼構造的散貨船”係指其貨艙是由側板為界壁的散貨船。

3. 散貨船“長度”係指現行《國際船舶載重線公約》所定義的長度。

4. “固體散貨”係指除液體或氣體之外的由顆粒、微粒或物質的任何較大片塊結合而成、通常成分相同、直接裝入船舶貨物處所而無需任何中間容納形式的任何物質。

5. “散貨船艙壁和雙層底強度標準”係指《1974 年國際海上人命安全公約》締約政府會議於 1997 年 11 月 27 日以決議 4 通過的、本組織可以修正的“估算兩個最前貨艙間的橫向水密的縱向波紋艙壁

尺寸和估算最前貨艙允許裝艙的標準”，除非此種修正係按本公約有關適用於附件除第 I 章外的修正程序的第 VIII 條的規定通過、生效和實施。

6. 術語“建議的船舶”與第 II-1/1.1.3.1 條中所定義的含義相同。

第 2 條

適用範圍

散貨船除應適用於其他各章的要求外，還應適用於本章的要求。

第 3 條

實施時間表

（本條適用於 1999 年 7 月 1 日之前建造的散貨船）

就第 XI/2 條所要求的加強的檢查方案而言，適用於第 4 或 6 條的散貨船應按下列時間表符合這些條文的規定：

.1 船齡在 1999 年 7 月 1 日為 20 年和以上的散貨船：至 1999 年 7 月 1 日以後的第一次中期檢驗或第一次定期檢驗之日，以先到日期為準；

.2 船齡在 1999 年 7 月 1 日為 15 年和以上但少於 20 年的散貨船：至 1999 年 7 月 1 日以後的第一次定期檢驗之日，但不晚於 2002 年 7 月 1 日；和

.3 船齡在 1999 年 7 月 1 日為少於 15 年的散貨船：至該船舶船齡到達 15 年之日後的第一次定期檢驗之日，但晚於該船舶船齡到達 17 年之日。

第 4 條

適用於散貨船的破損穩性要求

1. 長度等於和大於 150 米的單層舷側船殼構造、設計載運密度等於和大於 1000 公斤／米 ^{3} 的固體散貨、1999 年 7 月 1 日或之後建造的散貨船，當裝載至夏季載重線時，應能夠經受任何一個貨艙在所有裝載情況下的浸水並以第 3 款規定的滿意平衡狀況保持漂浮。這一要求應符合按照第 3 條規定的實施時間表。

2. 長度等於和大於 150 米的單層舷側船殼構造、載運密度等於和大於 1780 公斤／米 ^{3} 的固體散貨、1999 年 7 月 1 日之前建造的散貨船，當裝載至夏季載重線時，應能夠經受一個船艙貨艙在所有裝載情況下的浸水並以第 3 款規定的滿意平衡狀保持漂浮。這一要求應符合按照第 3 條規定的實施時間表。

3. 浸水後的平衡狀況應符合經第 A.514（13）號決議修正的第 A.320（IX）號決議—與《1966 年國際船舶載重線公約》第 27 條等效的條款—的附件中規定的平衡狀況，但應以第 6 款的規定為準。假定的浸水只需考慮到貨艙處所的浸水。裝載的貨艙的滲透率應假定為 0.9，而空艙的滲透率應假定為 0.95，除非與某一特定貨物有關的滲透率是為被貨物佔據的進水的貨艙容積所假定而 0.95 的滲透率是為該貨艙的剩餘空容積所假定的。

4. 1999 年 7 月 1 日之前建造、按照 1966 年 4 月 5 日通過的《1966 年國際船舶載重線公約》第 27（7）條已被勘定為降低乾舷的散貨船可視為符合第 2 款。

5. 按照經第 A.514（13）號決議修正的第 A.320（IX）號決議“與《1966 年國際船舶載重線公約》第 27 條等效的條款”第（8）段的規定已被勘定為降低乾舷的散貨船，可視情被視為符合第 1 款或第 2 款。

6. 在按照《1966 年國際船舶載重線公約的 1988 年議定書》附件 B 中所載的第 27（8）條規定已被勘定為降低乾舷的散貨船上，浸水後的平衡狀況應符合該議定書的有關規定。

第 5 條

散貨船的結構強度

（本條適用於 1999 年 7 月 1 日或之後建造的散貨船）

長度等於和大於 150 米的單層舷側船殼構造、設計載運密度等於和大於 1000 公斤／米 ^{3} 的固體散貨的散貨船，在同時也考慮到貨艙積水產生的動態影響並考慮到本組織通過的建議書的情況下，應具有足夠的強度經受任何一個貨艙在所有裝載和壓載情況下的浸水。

第 6 條

散貨船的結構和其他要求

（本條適用於 1999 年 7 月 1 日之前建造的散貨船）

1. 長度等於和大於 150 米的單層舷側船殼構造、設計載運密度等於和大於 1780 公斤／米 ^{3} 的固體散貨的散貨船，應按第 3 條中規定的實施時間表符合本條的要求。

2. 兩個船艏貨艙之間的橫向水密艙壁和船艏貨艙雙層底，在考慮到艙中積水產生的動態影響的情況下，按照散貨船艙壁和雙層底強度標準，應具有足夠的強度經受船艏貨艙的浸水。就本條而言，散貨船艙壁和雙層底強度標準應被看成是強制性的。

3. 在考慮加強橫向水密艙壁或雙層底以符合第 2 款要求的必要性和程度時，可計及下列限制：

.1 在貨艙之間分配整個貨物重量的限制；和

.2 最大載重量的限制。

4. 對於為滿足第 2 款的要求而使用上述第 3.1 和 3.2 項中所述的任何一項或兩項限制的船舶，凡當運載密度等於和大於 1780 公斤／米 ^{3} 的固體散貨時，應符合這些限制。

第 7 條

散貨船貨艙結構的檢驗

（本條適用於 1999 年 7 月 1 日之前建造的散貨船）

長度等於和大於 150 米的單層舷側船殼構、船齡為 10 年及以上的散貨船，不得載運密度等於和大於 1780 公斤／米 ^{3} 的固體散貨，除非它們令人滿意地進行了下列之一者：

.1 按照第 XI/2 條所要求的加強的檢查方案，定期檢驗；或

.2 與第 XI/2 條所要求的加強的檢查方案中的定期檢驗範圍相同的所有貨艙的檢驗。

第 8 條

有關符合散貨船要求的信息

1. 第 VI/7.2 條所要求的小冊子應由主管機關或代表其加以簽註，以視情指明第 4、5、6 和 7 條得到遵守。

2. 按照第 6 條的要求對載運密度等於和大於 1780 公斤／米^{3}的固體散貨所給與的任何限制應在第 1 款中所述的小冊子中加以確定和記錄。

3. 第 2 款適用的散貨船應在左右兩舷船舯側板的甲板線以下永久標示側面為 500 毫米和頂端為 300 毫米的堅固等邊三角形，並塗以與船殼反差明顯的顏色。

第 9 條

對由於其貨艙的設計形狀不能夠符合

第 4.2 條的散貨船的要求

（本條適用於 1999 年 7 月 1 日之前建造的散貨船）

對於適用於第 4.2 條的限制而建造成的橫向水密艙壁的數量不足以符合該條的散貨船，主管機關可允許放寬對第 4.2 和 6 條的適用，其條件是，它們應符合下列要求：

.1 對於船艏貨艙，第 XI/2 條所要求的加強的檢查方案中規定的年度檢驗的檢查應由其中規定的貨艙中期檢驗的檢查代替；

.2 按照第 XI/1 條的規定，視情在所有貨艙或貨物傳輸帶槽中安裝經主管機關或其認可的組織批准的污水井高水位報警器，並能在駕駛台給與視聽報警；和

.3 備有具體貨艙浸水設想詳細資料。該資料應附有根據《國際安全管理（安管）規則》第 8 節的規定進行撤離準備的詳細說明並作為船培訓和操練的基礎。

第 10 條

固體散貨密度說明

1. 在將散貨裝於散貨船之前，託運人應說明貨物密度，並提供第 VI/2 條所要求的貨物信息。

2. 對於第 6 條適用的散貨船，密度宣佈為在 1250 公斤／米 ^{3} 至 1780 公斤／米 ^{3} 之間的任何貨物，其密度均應由經正式認可的測試組織核實，除非此散貨船符合適於載運本章有關密度等於和大於 1780 公斤／米 ^{3} 的固體散貨的所有要求。

第 11 條

裝載儀

（本條適用於無論何建造日期的散貨船）

1. 長度等於和大於 150 米的散貨船，在考慮到本組織通過的建議的情況下，應裝有能夠提供船體桁材剪切力和彎曲力矩信息的裝載儀。

2. 建造於 1999 年 7 月 1 日之前的長度等於和大於 150 米的散貨船，應在不晚於 1999 年 7 月 1 日之後進行的該船首次中期或定期檢驗之日符合第 1 款的要求。”

RESOLUTION 1 OF THE CONFERENCE OF CONTRACTING GOVERNMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974 ADOPTED ON 27 NOVEMBER 1997

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

THE CONFERENCE,

RECALLING article VIII(c) of the International Convention for the Safety of Life at Sea, 1974 (hereinafter referred to as "the Convention"), concerning the procedure for amending the Convention by a Conference of Contracting Governments,

NOTING resolutions A.713(17) and A.797(19) adopted by the Assembly of the International Maritime Organization (IMO), concerning the safety of ships carrying solid bulk cargoes,

BEING DEEPLY CONCERNED at the continued loss of ships carrying bulk cargoes, sometimes without a trace, and the heavy loss of life incurred,

RECOGNIZING the urgent need to further improve the safety standards of ships carrying solid bulk cargoes, in all aspects of their design, equipment and operation to avoid recurrence of such casualties,

HAVING CONSIDERED amendments to the Annex to the Convention proposed and circulated to all Members of IMO and all Contracting Governments to the Convention,

1. ADOPTS, in accordance with article VIII(c)(ii) of the Convention, amendments to the Annex 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 1999, unless, prior to that date, more than one third of Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have notified the Secretary-General of IMO of 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 1999 upon their acceptance in accordance with paragraph 2 above.

ANNEX

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

The following new chapter XII is added after existing chapter XI:

"CHAPTER XII - ADDITIONAL SAFETY MEASURES FOR BULK CARRIERS

Regulation 1

Definitions

For the purpose of this chapter:

1 "Bulk carrier" means a bulk carrier as defined in regulation IX/1.6.

2 "Bulk carrier of single side skin construction" means a bulk carrier in which a cargo hold is bounded by the side shell.

3 "Length" of a bulk carrier means the length as defined in the International Convention on Load Lines in force.

4 "Solid bulk cargo" means any material, other than liquid or gas, consisting of a combination of particles, granules or any larger pieces of material, generally uniform in composition, which is loaded directly into the cargo spaces of a ship without any intermediate form of containment.

5 "Bulk carrier bulkhead and double bottom strength standards" means "Standards for the evaluation of scantlings of the transverse watertight vertically corrugated bulkhead between the two foremost cargo holds and for the evaluation of allowable hold loading of the foremost cargo hold" adopted by resolution 4 of the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974 on 27 November 1997, 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.

6 The term "ships constructed" has the same meaning as defined in regulation II-1/1.1.3.1.

Regulation 2

Application

Bulk carriers shall comply with the requirements of this chapter in addition to the applicable requirements of other chapters.

Regulation 3

Implementation schedule

(This regulation applies to bulk carriers constructed before 1 July 1999)

Bulk carriers to which regulations 4 or 6 apply shall comply with the provisions of such regulations according to the following schedule, with reference to the enhanced programme of inspections required by regulation XI/2:

.1 bulk carriers which are 20 years of age and over on 1 July 1999, by the date of the first intermediate survey or the first periodical survey after 1 July 1999, whichever comes first;

.2 bulk carriers which are 15 years of age and over but less than 20 years of age on 1 July 1999, by the date of the first periodical survey after 1 July 1999, but not later than 1 July 2002; and

.3 bulk carriers which are less than 15 years of age on 1 July 1999, by the date of the first periodical survey after the date on which the ship reaches 15 years of age, but not later than the date on which the ship reaches 17 years of age.

Regulation 4

Damage stability requirements applicable to bulk carriers

1 Bulk carriers of 150 m in length and upwards of single side skin construction, designed to carry solid bulk cargoes having a density of 1000 kg/m^3 and above, constructed on or after 1 July 1999 shall, when loaded to the summer load line, be able to withstand flooding of any one cargo hold in all loading conditions and remain afloat in a satisfactory condition of equilibrium, as specified in paragraph 3.

2 Bulk carriers of 150 m in length and upwards of single side skin construction, carrying solid bulk cargoes having a density of 1780 kg/m^3 and above, constructed before 1 July 1999 shall, when loaded to the summer load line, be able to withstand flooding of the foremost cargo hold in all loading conditions and remain afloat in a satisfactory condition of equilibrium, as specified in paragraph 3. This requirement shall be complied with in accordance with the implementation schedule specified in regulation 3.

3 Subject to the provisions of paragraph 6, the condition of equilibrium after flooding shall satisfy the condition of equilibrium laid down in the annex to resolution A.320(IX) - Regulation equivalent to regulation 27 of the International Convention on Load Lines, 1966, as amended by resolution A.514(13). The assumed flooding need only take into account flooding of the cargo hold space. The permeability of a loaded hold shall be assumed as 0.9 and the permeability of an empty hold shall be assumed as 0.95, unless a permeability relevant to a particular cargo is assumed for the volume of a flooded hold occupied by cargo and a permeability of 0.95 is assumed for the remaining empty volume of the hold.

4 Bulk carriers constructed before 1 July 1999 which have been assigned a reduced freeboard in compliance with regulation 27(7) of the International Convention on Load Lines, 1966, as adopted on 5 April 1966, may be considered as complying with paragraph 2.

5 Bulk carriers which have been assigned a reduced freeboard in compliance with the provisions of paragraph (8) of the regulation equivalent to regulation 27 of the International Convention on Load Lines, 1966, adopted by resolution A.320(IX), as amended by resolution A.514(13), may be considered as complying with paragraphs 1 or 2, as appropriate.

6 On bulk carriers which have been assigned reduced freeboard in compliance with the provisions of regulation 27(8) set out in Annex B of the Protocol of 1988 relating to the International Convention on Load Lines, 1966, the condition of equilibrium after flooding shall satisfy the relevant provisions of that Protocol.

Regulation 5

Structural strength of bulk carriers

(This regulation applies to bulk carriers constructed on or after 1 July 1999)

Bulk carriers of 150 m in length and upwards of single side skin construction, designed to carry solid bulk cargoes having a density of 1000 kg/m^3 and above, shall have sufficient strength to withstand flooding of any one cargo hold in all loading and ballast conditions, taking also into account dynamic effects resulting from the presence of water in the hold, and taking into account the recommendations adopted by the Organization.

Regulation 6

Structural and other requirements for bulk carriers

(This regulation applies to bulk carriers constructed before 1 July 1999)

1 Bulk carriers of 150 m in length and upwards of single side skin construction, carrying solid bulk cargoes having a density of 1780 kg/m^3 and above, shall comply with the requirements of this regulation in accordance with the implementation schedule specified in regulation 3.

2 The transverse watertight bulkhead between the two foremost cargo holds and the double bottom of the foremost cargo hold shall have sufficient strength to withstand flooding of the foremost cargo hold, taking also into account dynamic effects resulting from the presence of water in the hold, in compliance with the Bulk carrier bulkhead and double bottom strength standards. For the purpose of this regulation, the Bulk carrier bulkhead and double bottom strength standards shall be treated as mandatory.

3 In considering the need for, and the extent of, strengthening of the transverse watertight bulkhead or double bottom to meet the requirements of paragraph 2, the following restrictions may be taken into account:

.1 restrictions on the distribution of the total cargo weight between the cargo holds; and

.2 restrictions on the maximum deadweight.

4 For bulk carriers using either of, or both, the restrictions given in paragraphs 3.1 and 3.2 above for the purpose of fulfilling the requirements of paragraph 2, these restrictions shall be complied with whenever solid bulk cargoes having a density of 1780 kg/m^3 and above are carried.

Regulation 7

Survey of the cargo hold structure of bulk carriers

(This regulation applies to bulk carriers constructed before 1 July 1999)

Bulk carriers of 150 m in length and upwards of single side skin construction, of 10 years of age and over, shall not carry solid bulk cargoes having a density of 1780 kg/m^3 and above unless they have satisfactorily undergone either:

.1 a periodical survey in accordance with the enhanced programme of inspections required by regulation XI/2; or

.2 a survey of all cargo holds to the same extent as required for periodical surveys in the enhanced survey programme of inspections required by regulation XI/2.

Regulation 8

Information on compliance with requirements for bulk carriers

1 The booklet required by regulation VI/7.2 shall be endorsed by the Administration, or on its behalf, to indicate that regulations 4, 5, 6 and 7, as appropriate, are complied with.

2 Any restrictions imposed on the carriage of solid bulk cargoes having a density of 1780 kg/m^3 and above in accordance with the requirements of regulation 6 shall be identified and recorded in the booklet referred to in paragraph 1.

3 Bulk carriers to which paragraph 2 applies shall be permanently marked on the side shell at amidships, port and starboard, with a solid equilateral triangle having sides of 500 mm and its apex 300 mm below the deck line, and painted a contrasting colour to that of the hull.

Regulation 9

Requirements for bulk carriers not being capable of complying with regulation 4.2 due to the design configuration of their cargo holds

(This regulation applies to bulk carriers constructed before 1 July 1999)

For bulk carriers being within the application limits of regulation 4.2, which have been constructed with an insufficient number of transverse watertight bulkheads to satisfy that regulation, the Administration may allow relaxation from the application of regulations 4.2 and 6 on condition that they shall comply with the following requirements:

.1 for the foremost cargo hold, the inspections prescribed for the annual survey in the enhanced programme of inspections required by regulation XI/2 shall be replaced by the inspections prescribed therein for the intermediate survey of cargo holds;

.2 are provided with bilge well high water level alarms in all cargo holds, or in cargo conveyor tunnels, as appropriate, giving an audible and visual alarm on the navigation bridge, as approved by the Administration or an organization recognized by it in accordance with the provisions of regulation XI/1, and

.3 are provided with detailed information on specific cargo hold flooding scenarios. This information shall be accompanied by detailed instructions on evacuation preparedness under the provisions of Section 8 of the International Safety Management (ISM) Code and be used as the basis for crew training and drills.

Regulation 10

Solid bulk cargo density declaration

1 Prior to loading bulk cargo on a bulk carrier, the shipper shall declare the density of the cargo, in addition to providing the cargo information required by regulation VI/2.

2 For bulk carriers to which regulation 6 applies, unless such bulk carriers comply with all the relevant requirements of this chapter applicable to the carriage of solid bulk cargoes having a density of 1780 kg/m^3 and above, any cargo declared to have a density within the range 1250 kg/m^3 to 1780 kg/m^3 shall have its density verified by an accredited testing organization.

Regulation 11

Loading instrument

(This regulation applies to bulk carriers regardless of their date of construction)

1 Bulk carriers of 150 m in length and upwards shall be fitted with a loading instrument capable of providing information on hull girder shear forces and bending moments, taking into account the recommendation adopted by the Organization.

2 Bulk carriers of 150 m in length and upwards constructed before 1 July 1999 shall comply with the requirements of paragraph 1 not later than the date of the first intermediate or periodical survey of the ship to be carried out after 1 July 1999.

第 82/2014 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；

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；

國際海事組織海上安全委員會於一九九八年五月十八日透過第MSC.69（69）號決議通過了經修正的公約的修正案，該修正案自二零零二年七月一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第MSC.69（69）號決議的中文及英文文本。

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 82/2014

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 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;

Considerando igualmente que, em 18 de Maio de 1998, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.69(69), adoptou emendas à Convenção, tal como emendada, e que tais emendas são aplicáveis na Região Administrativa Especial de Macau, a partir de 1 de Julho de 2002;

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.69(69), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 24 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.69（69）號決議

（1998 年 5 月 18 日通過）

通過經修正的《1974 年國際海上人命安全公約》的修正案

海上安全委員會，

憶及《國際海事組織公約》有關本委員會職責的第 28（b）條，

還憶及《1974 年國際海上人命安全公約》（以下稱為"本公約"）有關修正除第 I 章外的本公約附件的程序的第 VIII（b）條，

在其第六十九次會議上**審議了**按本公約第 VIII（b）（i）條提議和分發的本公約修正案，

1. 按本公約第 VIII（b）（iv）條**通過**本公約的修正案，其條文載於本決議附件中；

2. 按本公約第 VIII（b）（vi）（2）（bb）條**決定**：該套修正案在 2002 年 1 月 1 日應視為已被接受，除非在此日期前超過三分之一的本公約締約政府或其綜合商船隊不少於世界商船隊總噸位 50%的締約政府作出通知反對該套修正案；

3. **請**各締約政府注意：按本公約第 VIII（b）（vii）（2）條，該套修正案在其按上述第 2 段被接受後應於 2002 年 7 月 1 日生效；

4. **要求**秘書長按本公約第 VIII（b）（v）條將本決議和附件中所載修正案的核證無誤副本分發給本公約的所有締約政府；

5. **還要求**秘書長將本決議及其附件的副本分發給非本公約締約政府的本組織會員。

附件

經修正的《1974 年國際海上人命安全公約》的修正案

第 II-1 章

構造－結構、分艙與穩性、機電設備

B 部分－分艙與穩性

第 14 條－客船和貨船的水密艙壁等等的構造和初次試驗

1 以下列條文取代第 3 款的現有條文：

“3 對各主要艙室進行灌水試驗是非強制性的。在未進行灌水試驗時，如可行應進行沖水試驗。該實驗應在船舶艤裝的最後階段進行。如沖水試驗因可能造成機電設備的絕緣或艤裝物品的損壞而不可行，則可由對焊接進行仔細的觀察檢查來代替，必要時應使用着色探傷試驗或超聲波探漏試驗或等效試驗予以輔助。在任何情況下都應對水密艙壁作徹底檢查。”

第 IV 章

無線電通信

第 1 條－適用範圍

2 在第 1 款中，在“this chapter”（本章）一詞前加上“Unless expressly provided otherwise”（除另有明文規定者外）。

第 2 條－術語和定義

3 在現有.15 項後加上下列新的第 1 款.16 項：

".16 *全球海上遇險和安全系統（遇險和安全系統）識別*係指海上移動業務識別、船舶呼號、海事衛星識別和系列號識別，它們可由船舶設備傳輸並用於識別船舶。"

4 以下列條文替代第 2 款的現有條文：

"2 本章中使用的和在《無線電規則》和《國際海上搜尋和救助公約》(《1979 搜救公約》）中作出定義並可予修正的所有術語和縮略語的意思與該規則和《搜救公約》中定義者相同。"

5 在現有第 5 條後加上下列新的第 5-1 條：

"第 5-1 條

全球海上遇險和安全系統識別

1 本條適用於從事所有航行的所有船舶。

2 每一締約政府承諾作出適當安排對全球海上遇險和安全系統（遇險和安全系統）識別作出登記並將有關這些識別的信息在一天 24 小時內隨時提供給救助協調中心。如適當，締約政府應將指定的識別通知管理此種識別登記的國際組織。"

第 13 條－能源

6 在第 8 款中，在"chapter"（章）一詞後加上"including the navigation receiver referred to in regulation 18"（包括第 18 條中所述的航行接收機）。

第 15 條－保養要求

7 在現有第 8 款後加上下列新的第 9 款：

“9 每隔不超過 12 個月應對衛星示位標作出測試，檢查其運作有效性的所有方面，特別是頻率穩定性、信號強度和編碼。但在正當和合理時，主管機關可將間隔期延長至 17 個月。可在船上或經認可的測試和維修站進行測試。”

8 在現有的第 17 條加上下列新的第 18 條：

“第 18 條

船位更新

所有本章適用的、能自動在遇險警報中列入船位的所有船載雙向通信設備應自動取得由外部或內部航行接收機（在裝有任一者時）提供的此種信息。如未安裝此種接收機，則在船舶航行時，應每隔不超過四小時對船位和測定船位的時間作手動更新，使其隨時可供通信設備傳輸。”

第 VI 章

貨物運輸

第 5 條 — 積載和繫固

9 以下列條文取代第 6 款的現有條文：

“6 在整個航行期間，非固體和液體散貨的所有貨物均應按主管機關批准的《貨物繫固手冊》裝船、積載和繫固。對第 II-2/3.14 條中定義的有滾裝貨物處所的船舶，按《貨物繫固手冊》對此種貨物的所有繫固均應在船舶離開泊位前完成。《貨物繫固手冊》應按至少等同於本組織制定的有關指南的標準編寫。”

第 VII 章

危險品運輸

第 5 條 — 證件

10 刪去第 6 款的現有條文。

第 6 條 — 積載要求

11 本條標題改為“積載和繫固”。

12 在現有第 5 款後加上下列新的第 6 款：

“6 在整個航行期間，非固體和液體散貨的所有貨物均應按主管機關批准的《貨物繫固手冊》裝船、積載和繫固。對第 II-2/3.14 條中定義的有滾裝貨物處所的船舶，按《貨物繫固手冊》對此種貨物的所有繫固均應在船舶離開泊位前完成。《貨物繫固手冊》應按至少等同於本組織制定的有關指南的標準編寫。”

RESOLUTION MSC.69(69)
(adopted on 18 May 1998)

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

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 chapter I,

HAVING CONSIDERED, at its sixty-ninth 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 2002, 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 2002 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, AS AMENDED

CHAPTER II-1

CONSTRUCTION - STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS

PART B - SUBDIVISION AND STABILITY

Regulation 14 - Construction and initial testing of watertight bulkheads, etc., in passenger ships and cargo ships

1 The existing text of paragraph 3 is replaced by the following:

"3 Testing main compartments by filling them with water is not compulsory. When testing by filling with water is not carried out, a hose test shall be carried out where practicable. This test shall be carried out in the most advanced stage of the fitting out of the ship. Where a hose test is not practicable because of possible damage to machinery, electrical equipment insulation or outfitting items, it may be replaced by a careful visual examination of welded connections, supported where deemed necessary by means such as a dye penetrant test or an ultrasonic leak test or an equivalent test. In any case a thorough inspection of the watertight bulkheads shall be carried out."

CHAPTER IV

RADIOCOMMUNICATIONS

Regulation 1 - Application

2 In paragraph 1, the words "Unless expressly provided otherwise," are inserted before the words "this chapter".

Regulation 2 - Terms and definitions

3 The following new subparagraph .16 of paragraph 1 is added after existing subparagraph .15:

".16 *Global Maritime Distress and Safety System (GMDSS) identities* means maritime mobile services identity, the ship's call sign, Inmarsat identities and serial number identity which may be transmitted by the ship's equipment and used to identify the ship."

4 The existing text of paragraph 2 is replaced by the following:

"2 All other terms and abbreviations which are used in this chapter and which are defined in the Radio Regulations and in the International Convention on Maritime Search and Rescue (SAR), 1979, as may be amended, shall have the meanings as defined in those Regulations and the SAR Convention."

5 The following new regulation 5-1 is added after existing regulation 5:

"Regulation 5-1

Global Maritime Distress and Safety System identities

1 This regulation applies to all ships on all voyages.

2 Each Contracting Government undertakes to ensure that suitable arrangements are made for registering Global Maritime Distress and Safety System (GMDSS) identities and for making information on these identities available to rescue co-ordination centres on a 24-hour basis. Where appropriate, international organizations maintaining a registry of these identities shall be notified by the Contracting Government of these assignments."

Regulation 13 - Source of energy

6 In paragraph 8, the words ", including the navigation receiver referred to in regulation 18," are inserted after the word "chapter".

Regulation 15 - Maintenance requirements

7 The following new paragraph 9 is added after existing paragraph 8:

"9 Satellite EPIRBs shall be tested at intervals not exceeding 12 months for all aspects of operational efficiency with particular emphasis on frequency stability, signal strength and coding. However, in cases where it appears proper and reasonable, the Administration may extend this period to 17 months. The test may be conducted on board the ship or at an approved testing or servicing station."

8 The following new regulation 18 is added after existing regulation 17:

"Regulation 18

Position-updating

All two-way communication equipment carried on board a ship to which this chapter applies which is capable of automatically including the ship's position in the distress alert shall be automatically provided with this information from an internal or external navigation receiver, if either is installed. If such a receiver is not installed, the ship's position and the time at which the position was determined shall be manually updated at intervals not exceeding four hours, while the ship is underway, so that it is always ready for transmission by the equipment."

CHAPTER VI

CARRIAGE OF CARGOES

Regulation 5 - Stowage and securing

9 The existing text of paragraph 6 is replaced by the following:

"6 All cargoes, other than solid and liquid bulk cargoes, shall be loaded, stowed and secured throughout the voyage in accordance with the Cargo Securing Manual approved by the Administration. In ships with ro-ro cargo spaces, as defined in regulation II-2/3.14, all securing of such cargoes, in accordance with the Cargo Securing Manual, shall be completed before the ship leaves berth. The Cargo Securing Manual shall be drawn up to a standard at least equivalent to relevant guidelines developed by the Organization."

CHAPTER VII

CARRIAGE OF DANGEROUS GOODS

Regulation 5 - Documents

10 The existing text of paragraph 6 is deleted.

Regulation 6 - Stowage requirements

11 The title of this regulation is replaced by "Stowage and securing".

12 The following new paragraph 6 is added after existing paragraph 5:

"6 All cargoes, other than solid and liquid bulk cargoes, shall be loaded, stowed and secured throughout the voyage in accordance with the Cargo Securing Manual approved by the Administration. In ships with ro-ro cargo spaces, as defined in regulation II-2/3.14, all securing of such cargoes, in accordance with the Cargo Securing Manual, shall be completed before the ship leaves berth. The Cargo Securing Manual shall be drawn up to a standard at least equivalent to relevant guidelines developed by the Organization."

第 83/2014 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；

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；

國際海事組織海上安全委員會於一九九九年五月二十七日透過第MSC.87（71）號決議通過了經修正的公約的修正案，有關修正案自二零零一年一月一日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第MSC.87（71）號決議的中文及英文文本。

二零一四年十月三十一日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 83/2014

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 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;

Considerando ainda que, em 27 de Maio de 1999, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.87(71), adoptou emendas à Convenção, tal como emendada, e que tais emendas são aplicáveis na Região Administrativa Especial de Macau, a partir de 1 de Janeiro de 2001;

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.87(71), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 31 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

MSC.87（71）號決議

（1999 年 5 月 27 日通過）

通過經修正的《1974 年國際海上人命安全公約》的修正案

海上安全委員會，

憶及《國際海事組織公約》有關本委員會職責的第 28（b）條，

還憶及《1974 年國際海上人命安全公約》（此後稱為“本公約”）有關除第一章規定在外的本公約附件的修正程序的第 VIII（b）條，

認識到需要強制應用某種議定的海上運輸輻照核燃料的國際標準，

在其第七十一次會議上**審議了**按本公約第 VIII（b）（i）條提議和分發的本公約修正案，

1. 按本公約第 VIII（b）（iv）條**通過**其條文載於本決議附件中的本公約修正案；

2. 按本公約第 VIII（b）（vi）（2）（bb）條**決定**本套修正案在 2000 年 7 月 1 日應視為已被接受，除非在此日期前超過三分之一的本公約締約政府或其合計商船隊不少於世界船隊總噸位 50%的締約政府通知反對本套修正案；

3. **請**各締約政府注意，按本公約第 VIII（b）（vii）（2）條，本套修正案在按上文第 2 段接受後應於 2001 年 1 月 1 日生效；

4. **要求**秘書長按本公約第 VIII（b）（v）條將本決議和附件中所載修正案條文的核證無誤副本分發給本公約的所有締約政府；

5. **還要求**秘書長將本決議及其附件的副本分發給非屬本公約締約政府的本組織會員。

附件

經修正的《1974 年國際海上人命安全公約》的修正案

第 VII 章

危險品運輸

第 A 部分

1 在現有第 1 條 3 款結尾處加入以下句子：

“此外，第 D 部分的要求應適用於第 14.2 條中作出定義的輻照核燃料貨物的運輸”。

2 在現有的第 C 部分後加入以下新的第 D 部分：

“第 D 部分

對運輸船載包裝輻照核燃料、鈈和高水平放射性廢物的特別要求

第 14 條

定義

除另有明文規定者外，就本部分而言：

1 *《輻照核燃料規則》*係指由本組織海上安全委員會以第 MSC.88(71)號決議通過的《國際安全運輸船載包裝輻照核燃料、鈈和高水平放射性廢物規則》；它可由本組織作出修正，但此種修正案應按本公約第 VIII 條有關適用於除第 I 章者外的附件修正程序的規定予以通過、生效和實施。

2 *輻照核燃料貨物*係指作為貨物按《國際危規》第 7 類表 10、11、12 或 13 運輸的包裝輻照核燃料、鈈和高水平放射性廢物。

3 *輻照核燃料*係指含有鈾、鈈和/或鋦同位素、已被用於保持獨立核連鎖反應的物質。

4 *鋦*係指從回收輻照核燃料中提取的該物質同位素的合成混合物。

5 *高水平放射性廢物*係指在輻照核燃料回收裝置的第一階段提取系統的運行中生成的液體廢物或在以後的提取階段中生成的濃縮廢物或由此種液體廢物轉化的固體物質。

6 *《國際危規》*係指由本組織大會以第 A.716(17)號決議通過的經修正的並可由海上安全委員會作出修正的《國際海上危險品規則》。

第 15 條

對運輸輻照核燃料貨物船舶的適用範圍

1 除第 2 款中規定者外，本部分應適用於從事輻照核燃料貨物運輸的所有船舶，不論其建造日期和尺寸，包括小於 500 總噸的貨船。

2 本部分和《輻照核燃料規則》不適用於軍艦、海軍輔助船舶或在其時僅從事政府非商業服務、由締約政府擁有或營運的其他船舶；但每一主管機關應通過採用不影響由其擁有或營運的此種船舶的操作或操作能力的適當措施確保運輸輻照核燃料貨物的此種船舶在合理和可行時以符合本部分和《輻照核燃料規則》的方式行動。

3 本部分和《輻照核燃料規則》中的任何規定均不應損害國際法中規定的各政府的權利和義務，為履約採取的任何行動均應符合國際法。

第 16 條

對運輸輻照核燃料貨物船舶的要求

1 運輸輻照核燃料貨物的船舶除符合本規則的任何其他適用要求外，還應符合《輻照核燃料規則》的要求並應按該規則作出檢驗和發證。

2 持有按 1 款規定頒發的證書的船舶，應接受在 I/19 和 XI/4 條中規定的檢查。為此目的，此種證書應按根據 I/12 或 I/13 條頒發的證書對待。”

RESOLUTION MSC.87(71)
(adopted on 27 May 1999)

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

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,

RECOGNIZING the need for the mandatory application of an agreed international standard for the carriage of INF cargo by sea,

HAVING CONSIDERED, at its seventy-first 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 July 2000, 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 January 2001 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, AS AMENDED

CHAPTER VII
CARRIAGE OF DANGEROUS GOODS

PART A

1 The following sentence is added at the end of existing paragraph 3 of regulation 1:

"In addition, the requirements of part D shall apply to the carriage of INF cargo as defined in regulation 14.2".

2 The following new part D is added after existing part C:

"PART D

SPECIAL REQUIREMENTS FOR THE CARRIAGE OF PACKAGED IRRADIATED NUCLEAR FUEL, PLUTONIUM AND HIGH-LEVEL RADIOACTIVE WASTES ON BOARD SHIPS

Regulation 14

Definitions

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

1 *INF Code* means the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships adopted by the Maritime Safety Committee of the Organization by resolution MSC.88(71), 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.

2 *INF cargo* means packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes carried as cargo in accordance with Class 7 of the IMDG Code, schedule 10, 11, 12 or 13.

3 *Irradiated nuclear fuel* means material containing uranium, thorium and/or plutonium isotopes which has been used to maintain a self-sustaining nuclear chain reaction.

4 *Plutonium* means the resultant mixture of isotopes of that material extracted from irradiated nuclear fuel from reprocessing.

5 *High-level radioactive wastes* means liquid wastes resulting from the operation of the first stage extraction system or the concentrated wastes from subsequent extraction stages, in a facility for reprocessing irradiated nuclear fuel, or solids into which such liquid wastes have been converted.

6 *IMDG Code* means the International Maritime Dangerous Goods Code adopted by the Assembly of the Organization by resolution A.716(17), as amended and may be amended by the Maritime Safety Committee.

Regulation 15

Application to ships carrying INF cargo

1 Except as provided for in paragraph 2, this part shall apply to all ships regardless of the date of construction and size, including cargo ships of less than 500 gross tonnage, engaged in the carriage of INF cargo.

2 This part and the INF Code do not apply to warships, naval auxiliary or other vessels owned or operated by a Contracting Government and used, for the time being, only on government non-commercial service; however, each Administration shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such ships owned or operated by it, that such ships carrying INF cargo act in a manner consistent, so far as reasonable and practicable, with this part and the INF Code.

3 Nothing in this part or the INF Code shall prejudice the rights and duties of governments under international law and any action taken to enforce compliance shall be consistent with international law.

Regulation 16

Requirements for ships carrying INF cargo

1 A ship carrying INF cargo shall comply with the requirements of the INF Code in addition to any other applicable requirements of the present regulations and shall be surveyed and certified as provided for in that Code.

2 A ship holding a certificate issued pursuant to the provisions of paragraph 1 shall be subject to the control established in regulations I/19 and XI/4. For this purpose, such certificate shall be treated as a certificate issued under regulation I/12 or I/13."

第 84/2014 號行政長官公告

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《1974年國際海上人命安全公約》（下稱“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；

國際海事組織海上安全委員會於二零零零年五月二十六日透過第MSC.91（72）號決議通過了經修正的公約修正案，該修正案自二零零二年一月一日起對澳門特別行政區生效；

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第MSC.91（72）號決議的中文及英文文本。

二零一四年十月三十一日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 84/2014

Considerando 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 Internacional para a Salvaguarda da Vida Humana no Mar de 1974, adiante designada por Convenção, tal como emendada, na Região Administrativa Especial de Macau a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 26 de Maio de 2000, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.91(72), adoptou emendas à Convenção, tal como emendada, e que tais emendas entraram em vigor, em relação à Região Administrativa Especial de Macau, a partir de 1 de Janeiro de 2002;

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.91(72), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 31 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.91（72）號決議

（2000 年 5 月 26 日通過）

通過經修正的《1974 年國際海上人命安全公約》的修正案

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，

還憶及《1974 年國際海上人命安全公約》（《安全公約》）（以下簡稱“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，

注意到在其第 70 次會議上作出的決定：對非滾裝客船應廢除《安全公約》第 III/28.2 條的要求（1999 年 7 月 1 日或以後建造的、長度 130 米及以上的客船應裝有直升飛機降落區），並注意到按此決定發出的關於涉及非滾裝客船上直升飛機降落區的《安全公約》第 III/28.2 條的適用範圍的第 MSC/Circ.907 號通函，

還注意到在《1974 年安全公約》中增加了由 1997 年《安全公約》會議以第 1 號決議通過的《安全公約》新的第 XII 章（散貨船附加安全措施），

在其第 72 次會議上**審議了**按本公約第 VIII（b）（i）條提議並分發的本公約修正案，

1. 按本公約第 VIII（b）（iv）條**通過**本公約的修正案，其條文載於本決議附件中；

2. 按本公約第 VIII（b）（vi）（2）（bb）條**決定**：該修正案應於 2001 年 7 月 1 日視為已被接受，除非在此日期之前，有超過三分之一的本公約締約政府或其合計商船隊不少於世界商船隊總噸位 50%的締約政府通知反對該修正案；

3. **請**各締約政府注意，按本公約第 VIII（b）（vii）（2）條，在該修正案按上述第 2 段被接受後，應於 2002 年 1 月 1 日生效；

4. **要求**秘書長按照本公約第 VIII（b）（v）條，將本決議及附件中所載修正案條文的核正副本轉送給本公約的所有締約政府；

5. **還要求**秘書長將本決議及其附件的副本轉送給非本公約締約政府的本組織會員。

附件

經修正的《1974 年國際海上人命安全公約》的修正案

第 III 章

救生設備和裝置

第 28 條—直升飛機降落和登乘區

1 在該條第 2 款中，“客船”一詞由“滾裝客船”取代。

附錄

證書

2 在《1974 年國際海上人命安全公約》附件的附錄中所載的“貨船安全構造證書”和“貨船安全設備證書”格式中，在“船舶類型”標題下，將“散貨船”一詞加在標題與“油輪”一詞之間。

RESOLUTION MSC.91(72)
(adopted on 26 May 2000)

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

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,

NOTING its decision, at its seventieth session, that the requirement of SOLAS regulation III/28.2 (that passenger ships of 130 m in length and upwards constructed on or after 1 July 1999 should be fitted with a helicopter landing area) should be repealed for non ro-ro passenger ships, and the subsequent issuance to this effect of MSC/Circ.907 on Application of SOLAS regulation III/28.2 concerning helicopter landing areas on non ro-ro passenger ships,

NOTING FURTHER the addition to the 1974 SOLAS Convention of a new SOLAS chapter XII (Additional safety measures for bulk carriers) adopted by resolution 1 of the 1997 SOLAS Conference,

HAVING CONSIDERED, at its seventy-second 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 July 2001, 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 January 2002, 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, AS AMENDED

CHAPTER III
LIFE-SAVING APPLIANCES AND ARRANGEMENTS

Regulation 28 – Helicopter landing and pick-up areas

1 In paragraph 2 of the regulation, the words "Passenger ships" are replaced by the words "Ro-ro passenger ships".

APPENDIX
CERTIFICATES

2 In the form of the Cargo Ship Safety Construction Certificate and the Cargo Ship Safety Equipment Certificate given in the appendix to the Annex to the International Convention for the Safety of Life at Sea, 1974, under the heading "Type of ship", the words "Bulk carrier" are inserted between the heading and the words "Oil tanker".

第 85/2014 號行政長官公告

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《1974年國際海上人命安全公約》自一九九九年十二月二十日起適用於澳門特別行政區；

國際海事組織海上安全委員會於二零零零年十二月五日透過第MSC.101（73）號決議通過了《國際耐火試驗程序應用規則》修正案，且有關修正案自二零零二年七月一日起對澳門特別行政區生效；

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第MSC.101（73）號決議的中文及英文文本。

二零一四年十月四日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 85/2014

Considerando 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 Internacional para a Salvaguarda da Vida Humana no Mar de 1974, tal como emendada, na Região Administrativa Especial de Macau, a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 5 de Dezembro de 2000, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.101(73), adoptou emendas ao Código Internacional dos Procedimentos para as Provas de Fogo, e que tais emendas entraram em vigor, em relação à Região Administrativa Especial de Macau, em 1 de Julho de 2002;

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.101(73), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 4 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.101（73）號決議

（2000 年 12 月 5 日通過）

通過《國際耐火試驗程序應用規則》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，

又憶及第 MSC.61（67）號決議，海安會以該決議通過了在從事國際海上運輸的船舶和艇筏的設計和建造中不斷採用的船用新材料的試驗的《國際耐火試驗程序應用規則》（FTP 規則），

還憶及第 MSC.36（63）號決議，海安會以該決議通過了在國際海上運輸中當時不斷採用的新型式和新尺度的高速船的《國際高速船安全規則》（1994 年 HSC 規則），

認識到需要將自《1994 年 HSC 規則》通過以來高速船建造材料的持續發展和海上安全標準的提高反映到高速船設計、建造和設備的規定中，以便維持其發證和安全等效於傳統設計的船舶，

注意到第 MSC.97（73）號決議，海安會以該決議通過了《2000 年國際高速船安全規則》（2000 年 HSC 規則），規定根據《FTP 規則》，該規則所適用的高速船在建造中使用的材料應採用耐火試驗程序，

還注意到《1974 年國際海上人命安全公約（SOLAS）》（以下簡稱“本公約”）關於《FTP 規則》修正程序的第 VIII（b）條和附件第 II-2/3.23 條，

在其第 73 次會議上，**審議了**根據本公約第 VIII（b）（i）條提議並分發的《FTP 規則》修正案，

1. 根據本公約第 VIII（b）（iv）條，**通過了**《FTP 規則》修正案，其條文列於本決議附件中；

2. 根據本公約第 VIII（b）（vi）（2）（bb）條，**決定**修正案應於 2002 年 1 月 1 日視為已被接受，除非在此日期之前，有超過三分之一的本公約締約國政府或合計商船總噸位不少於世界商船總噸位 50%的締約國政府，通知其反對該修正案；

3. **請**締約國政府注意，根據本公約第 VIII（b）（vii）（2）條，修正案依上述第 2 段被接受後，應於 2002 年 7 月 1 日生效；

4. **要求**秘書長按照本公約第 VIII（b）（v）條，將本決議和附件中所載修正案條文的核證副本發送所有締約國政府；

5. **還要求**秘書長將本決議及其附件的副本發送不是本公約締約國政府的本組織會員。

附件

《國際耐火試驗程序應用規則》

（FTP 規則）修正案

9－參考文件清單

1 在第.11 款後增加參考文件第.12 和.13 款如下：

“.12 經第 MSC.90（71）號決議修正的第 MSC.40（64）號決議—高速船船用材料確定為阻燃材料的標準；和

.13 第 MSC.45（65）號決議—高速船耐火分隔的試驗程序。”

附件 1

耐火試驗程序

2 新增第 10 和 11 部分如下：

“**第 10 部分—高速船阻燃材料的試驗**

1 適用範圍

若高速船所用材料要求為阻燃材料，則其應符合本部分的要求。

2 耐火試驗程序

要求為阻燃材料的艙壁、牆和天花板襯板包括其支撐結構、家具及其他結構或內部構件的表面材料，應根據經第 MSC.90（71）號決議修正的第 MSC.40（64）號決議規定的耐火試驗程序進行試驗和評定。

第 11 部分—高速船耐火分隔的試驗

1 適用範圍

若高速船所用的結構要求具有耐火性，則其應符合本部分的要求。此類結構包括耐火艙壁、甲板、天花板、襯板和門。

2 耐火試驗程序

高速船耐火分隔應根據第 MSC.45（65）號決議規定的耐火試驗程序進行試驗和評定。

3 附加要求

3.1 耐火分隔使用的材料應為根據本附件第 1 部分或第 10 部分所分別驗證的不燃材料或阻燃材料。

3.2 本附件第 3 部分也適用於窗、擋火閘、管路貫穿和纜線穿口等構造。

3.3 本附件第 4 部分也適用於要求防火門控制系統能夠在火災時操作的情況。

3.4 如果允許在耐火分隔中將可燃鑲片與不燃基墊一起使用，若要求此類鑲片具有低播焰性，則其應根據本附件第 5 部分加以驗證。”

附件 2

可能未經試驗和／或認可就已安裝的產品

3 在附件 2 現有第 2.2 款後新增第 2.3 款如下：

“2.3 對於高速船，阻燃材料被認為符合附件 1 第 2 部分的要求，無需進一步試驗。”

4 在附件 2 現有第 5.2 款後新增第 5.3 款如下：

“5.3 對於高速船，被確定為阻燃材料的表面和材料被認為符合附件 1 第 5 部分的要求，無需進一步試驗。”

RESOLUTION MSC.101(73)
(adopted on 5 December 2000)

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CODE FOR APPLICATION OF FIRE TEST PROCEDURES

THE MARITIME SAFETY COMMITTEE,

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

RECALLING ALSO resolution MSC.61(67) by which it adopted the International Code for Application of Fire Test Procedures (FTP Code) for the testing of new marine materials which are increasingly being introduced into the design and construction of ships and craft engaged in international maritime transport,

RECALLING FURTHER resolution MSC.36(63) by which it adopted the International Code of Safety for High-Speed Craft (1994 HSC Code) for high-speed craft of novel types and sizes which at the time were also increasingly being introduced into international maritime transport,

RECOGNIZING that the continual development of materials for use in the construction of high-speed craft and the improvements in maritime safety standards since the adoption of the 1994 HSC Code are required to be reflected in the provisions for the design, construction and equipment of high-speed craft in order to maintain certification and safety equivalence with those for ships of conventional design,

NOTING resolution MSC.97(73) by which it adopted the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code) providing for the application of fire test procedures for materials used in the construction of high-speed craft to which that Code applies, in accordance with the FTP Code,

NOTING ALSO article VIII(b) and regulation II-2/3.23 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention") concerning the procedure for amending the FTP Code,

HAVING CONSIDERED, at its seventy-third session, amendments to the FTP Code proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the FTP Code, 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 2002, 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 2002 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 CODE FOR APPLICATION OF FIRE TEST PROCEDURES (FTP CODE)

9 - LIST OF REFERENCES

1 The following references .12 and .13 are added after subparagraph .11:

"**.12** resolution MSC.40(64), as amended by resolution MSC.90(71) – Standard for qualifying marine materials for high-speed craft as fire-restricting materials; and

.13 resolution MSC.45(65) – Test procedures for fire-resisting divisions of high-speed craft".

ANNEX 1

FIRE TEST PROCEDURES

2 The following new parts 10 and 11 are added as follows:

"**Part 10 – Test for fire-restricting materials for high-speed craft**

1 APPLICATION

Where materials used in high-speed craft are required to be fire-restricting, they shall comply with this part.

2 FIRE TEST PROCEDURE

Surface materials on bulkheads, wall and ceiling linings including their supporting structure, furniture, and other structural or interior components required to be fire-restricting materials shall be tested and evaluated in accordance with the fire test procedures specified in resolution MSC.40(64), as amended by resolution MSC.90(71).

Part 11 – Test for fire-resisting divisions of high-speed craft

1 APPLICATION

Where constructions for use in high-speed craft are required to have fire-resisting properties, they shall comply with this part. Such constructions include fire-resisting bulkheads, decks, ceilings, linings and doors.

2 FIRE TEST PROCEDURE

Fire-resisting divisions of high-speed craft shall be tested and evaluated in accordance with the fire test procedures specified in resolution MSC.45(65).

3 ADDITIONAL REQUIREMENTS

3.1 Materials used in fire-resisting divisions shall be non-combustible or fire-restricting as verified in accordance with part 1 or part 10 of this annex, respectively.

3.2 Part 3 of this annex is also applicable to certain constructions such as windows, fire dampers, pipe penetrations and cable transits.

3.3 Part 4 of this annex is also applicable where a control system of fire doors is required to be able to operate in case of fire.

3.4 Where combustible veneers are allowed to be provided in fire-resisting divisions in conjunction with non-combustible substrates, the low flame-spread characteristics of such veneers, if required, shall be verified in accordance with part 5 of this annex."

ANNEX 2

PRODUCTS WHICH MAY BE INSTALLED WITHOUT TESTING AND/OR APPROVAL

3 The following new paragraph 2.3 is added to annex 2 after existing paragraph 2.2:

"**2.3** For high-speed craft, fire-restricting materials are considered to comply with the requirements of part 2 of annex 1 without further testing."

4 The following new paragraph 5.3 is added to annex 2 after existing paragraph 5.2:

"**5.3** For high-speed craft, surfaces and materials that are qualified as fire-restricting materials are considered to comply with the requirements of part 5 of annex 1 without further testing."

第 86/2014 號行政長官公告

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《1974年國際海上人命安全公約》自一九九九年十二月二十日起適用於澳門特別行政區；

國際海事組織海上安全委員會於二零零四年十二月十日透過第MSC.173（79）號決議通過了《國際耐火試驗程序應用規則》（FTP規則）修正案，且有關修正案自二零零六年七月一日起對澳門特別行政區生效；

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第MSC.173（79）號決議的中文及英文文本。

二零一四年十一月五日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 86/2014

Considerando 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 Internacional para a Salvaguarda da Vida Humana no Mar de 1974, tal como emendada, na Região Administrativa Especial de Macau, a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 10 de Dezembro de 2004, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.173(79), adoptou emendas ao Código Internacional dos Procedimentos para as Provas de Fogo (Código FTP), e que tais emendas entraram em vigor, na Região Administrativa Especial de Macau, em 1 de Julho de 2006;

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.173(79), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 5 de Novembro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第MSC.173（79）號決議

（2004年12月10日通過）

通過《國際耐火試驗程序應用規則》

（FTP規則）修正案

海上安全委員會，

憶及《國際海事組織公約》關於本委員會職能的第28（b）條，

注意到海安會第MSC.61（67）號決議，委員會以該決議通過了《國際耐火試驗程序應用規則》（以下簡稱“FTP規則”），根據《1974年國際海上人命安全公約》（SOLAS）（以下簡稱“公約”）第II-2條，該規則已具有強制性，

還注意到公約關於FTP規則修正程序的第VIII（b）條和第II-2/3.23條，

在其第七十九屆會議上**審議了**根據公約第VIII（b）（i）條建議並散發的FTP規則修正案，

1. 根據公約第VIII（b）（iv）條，**通過了**FTP規則的修正案，正文列於本決議之附件；

2. **決定**，根據公約第VIII（b）（vi）（2）（bb）條，上述修正案將於2006年1月1日視為已被接受，除非在該日期以前，有超過三分之一的締約國政府或者合計商船總噸位佔世界商船總噸位不少於50%的締約國政府通知其反對修正案；

3. **提請**公約締約國政府注意，根據公約第VIII（b）（vii）（2）條，修正案在根據上文第2段被接受後，將於2006年7月1日生效；

4. **要求**秘書長根據公約第VIII（b）（v）條，將本決議及其所附修正案正文的核正無誤副本送公約的所有締約國政府；

5. **還要求**秘書長將本決議及其附件的副本送所有非公約締約國政府的本組織成員。

附 件

《國際耐火試驗程序應用規則》（FTP規則）修正案

附件1–耐火試驗程序

第2部分–煙霧和毒性試驗

2.6 分類標準

2.6.2 毒性

在限制表中，在記錄“$SO_2$120ppm”之後增加以下內容：

“（地板覆蓋層：200ppm）”

RESOLUTION MSC.173(79)

(adopted on 10 December 2004)

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CODE FOR APPLICATION OF FIRE TEST PROCEDURES (FTP CODE)

THE MARITIME SAFETY COMMITTEE,

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

NOTING resolution MSC.61(67), by which it adopted the International Code for Application of Fire Test Procedures (hereinafter referred to as "the FTP Code"), which has become mandatory under chapter II-2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention"),

NOTING ALSO article VIII(b) and regulation II-2/3.23 of the Convention concerning the procedure for amending the FTP Code,

HAVING CONSIDERED, at its seventy-ninth session, amendments to the FTP Code proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the FTP Code, 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 2006 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 2006 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 CODE FOR APPLICATION OF FIRE TEST PROCEDURES (FTP CODE)

ANNEX 1 – FIRE TEST PROCEDURES

Part 2 – Smoke and toxicity test

2.6 Classification criteria

2.6.2 Toxicity

In the table of limits, the following text is added after the entry "SO_2 120 ppm":

"(200 ppm for floor coverings)";

第 87/2014 號行政長官公告

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《1974年國際海上人命安全公約》（下稱"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；

國際海事組織海上安全委員會於二零零一年六月六日透過第MSC.118（74）號決議通過了《國際安全運輸船載包裝輻照核燃料、鈰和高水平放射性廢物規則》（《輻照規則》）的修正案，且有關修正案自二零零三年一月一日起對澳門特別行政區生效；

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第MSC.118（74）號決議的中文及英文文本。

二零一四年十一月五日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 87/2014

Considerando 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 Internacional para a Salvaguarda da Vida Humana no Mar de 1974, adiante designada por Convenção, tal como emendada, na Região Administrativa Especial de Macau, a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 6 de Junho de 2001, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.118(74), adoptou emendas ao Código Internacional para a Segurança do Transporte de Combustível Nuclear Irradiado, de Plutónio e de Resíduos Altamente Radioactivos em Barris a Bordo de Navios (Código INF), e que tais emendas entraram em vigor, em relação à Região Administrativa Especial de Macau, a partir de 1 de Janeiro de 2003;

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.118(74), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 5 de Novembro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.118（74）號決議

（2001 年 6 月 6 日通過）

通過《國際安全運輸船載包裝輻照核燃料、鈈和高水平放射性廢物規則》（《輻照規則》）的修正案

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，

注意到第 MSC.88（71）號決議，委員會以該決議通過了《國際安全運輸船載包裝輻照核燃料、鈈和高放射性廢物規則》（以下簡稱《輻照規則》）；根據《1974 年國際海上人命安全公約》（SOLAS）（以下稱“本公約”）第 VII 章，該規則具有強制性，

還注意到《國際海運危險貨物規則》（《國際危規》）第 30 套修正案（以第 MSC/Circ.961 號通函散發）特別在該規則中納入了新的運輸清單 14，

認識到有必要修正《輻照規則》，使其與上述《國際危規》第 30 套修正案一致，

還注意到有關修正《輻照規則》的程序的本公約第 VIII（b）條和第 VII/14.1 條，

在其第 74 次會議上**審議了**按照本公約第 VIII（b）（i）條提出並散發的《輻照規則》修正案，

1. 按照本公約第 VIII（b）（iv）條，**通過了**《輻照規則》修正案，其條文載於本決議附件中；

2. 按照本公約第 VIII（b）（vi）（2）（bb）條，**決定**修正案應於 2002 年 7 月 1 日視為已被接受，除非在此日期之前，有超過三分之一的本公約締約國政府或其合計商船隊總噸位不少於世界商船隊總噸位 50%的締約國政府通知其反對該修正案；

3. **請**締約國政府注意，按照本公約第 VIII（b）（vii）（2）條，修正案按照上述第 2 段被接受後，應於 2003 年 1 月 1 日生效；

4. **要求**秘書長按照本公約第 VIII（b）（v）條，將本決議和附件中所載修正案條文的核正副本發送本公約所有締約國政府；

5. **還要求**秘書長將本決議及其附件的副本發送非本公約締約國的本組織會員。

附件

《國際安全運輸船載包裝輻照核燃料、鈰和高水平放射性廢物規則》(《輻照規則》)的修正案

第 1 章－總則

1.1 定義

在第 1.1.1.3 段中，“清單 10、11、12 或 13”的字樣由“運輸清單 10、11、12、13 或 14”代替。

RESOLUTION MSC.118(74)
(adopted on 6 June 2001)

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CODE FOR THE SAFE CARRIAGE OF PACKAGED IRRADIATED NUCLEAR FUEL, PLUTONIUM AND HIGH-LEVEL RADIOACTIVE WASTES ON BOARD SHIPS (INF CODE)

THE MARITIME SAFETY COMMITTEE,

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

NOTING resolution MSC.88(71), by which it adopted the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (hereinafter referred to as the "INF Code"), which is mandatory under chapter VII of the International Convention for the Safety of Life at Sea (SOLAS), 1974, (hereinafter referred to as "the Convention"),

NOTING FURTHER that amendment 30 to the International Maritime Dangerous Goods (IMDG) Code (disseminated by means of MSC/Circ. 961) incorporates, *inter alia,* a new transport schedule 14 into that Code,

RECOGNIZING the need to amend the INF Code to align it with the aforementioned IMDG Code amendment 30,

NOTING ALSO article VIII(b) and regulation VII/14.1 of the Convention concerning the procedure for amending the INF Code,

HAVING CONSIDERED, at its seventy-fourth session, amendments to the INF Code proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the INF Code, 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 July 2002, 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 January 2003 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 CODE FOR THE SAFE CARRIAGE OF PACKAGED IRRADIATED NUCLEAR FUEL, PLUTONIUM AND HIGH-LEVEL RADIOACTIVE WASTES ON BOARD SHIPS (INF CODE)

Chapter 1 – General

1.1 Definitions

In paragraph 1.1.1.3, the words "schedule 10, 11, 12 or 13" are replaced by the words "transport schedule 10, 11, 12, 13 or 14".

第 88/2014 號行政長官公告

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《1974年國際海上人命安全公約》自一九九九年十二月二十日起適用於澳門特別行政區；

國際海事組織海上安全委員會於二零零四年五月二十日透過第MSC.158（78）號決議通過了《用於檢查的進出通道的技術規定》修正案，且該修正案自二零零六年一月一日起對澳門特別行政區生效；

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第MSC.158（78）號決議的中文及英文文本。

二零一四年十一月四日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 88/2014

Considerando 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 Internacional para a Salvaguarda da Vida Humana no Mar de 1974, adiante designada por Convenção, tal como emendada, na Região Administrativa Especial de Macau, a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 20 de Maio de 2004, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.158(78), adoptou emendas às Disposições Técnicas relativas aos Meios de Acesso para as Inspecções, e que, tais emendas entraram em vigor, em relação à Região Administrativa Especial de Macau, a partir de 1 de Janeiro de 2006;

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.158(78), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 4 de Novembro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.158（78）號決議

（2004 年 5 月 20 日通過）

通過用於檢查的進出通道的技術規定修正案

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，

注意到，海安會第 MSC.133（76）號決議通過的“檢驗通道技術規定”（以下簡稱“技術規定”），是海安會第 MSC.134（76）號決議通過的《安全公約》第 II-1 章第 3-6 條下關於進出油輪和散貨船貨物區域處所及在這些處所內的強制性規定，

意識到，對已注意到的實施技術規定要求時可能會遇到的問題表示的擔心，

還注意到，為解決上述擔心，海安會第 MSC.151（78）號決議通過的對上述《安全公約》第 II-1 章第 3-6 條的修正案，

在其第 78 屆會議上，審議了根據《1974 年安全公約》第 VIII 條和第 II-1 章第 3-6 條的規定所準備的並已散發的技術規定的修正案，

1. 通過了檢驗通道技術規定修正案，修正案的正文列於本決議的附件；

2. 決定，根據《公約》第 VIII（b）（vi）（2）（bb）條的規定，上述修正案將於 2005 年 7 月 1 日視為被接受，除非在此日期之前，三分之一以上公約締約國政府或合計商船隊不少於世界商船隊總噸位 50%的締約國政府對此修正案提出反對意見；

3. 邀請《安全公約》締約國政府注意到，根據公約第 VIII（b）（vi）（2）條的規定，該修正案在他們依據上述第 2 段被接受後，將於 2006 年 1 月 1 日生效；

4. 要求秘書長將此決議及附件中所列的技術規定正文的核正無誤的文本發送給公約的所有締約國政府；

5. 還要求秘書長將此決議及附件的副本發送給非公約締約國政府的本組織的所有成員國。

附件

用於檢查的進出通道的技術規定修正案

（第 MSC.133（76）號決議）

1 檢驗通道技術規定的現有內容由下列代替：

“1 序言

1.1 保持船舶結構狀況符合適用要求的唯一方法是對其所有元部件進行終身定期檢驗，已被長期公認。這樣將確保他們免於因腐蝕、過載或接觸破損而帶來的諸如破裂、彎曲或變形的損壞，並能確保厚度的減少在給定的限值之內。為了實施全面的和近觀檢驗，提供出入船體結構的適當方式是必要的，而且，這樣的方式在船舶設計階段就應給與考慮和提供。

1.2 船舶的設計和建造應充分考慮到在其使用壽命期間，船旗國的檢查人員和船級社的檢驗人員如何對其進行檢驗，以及船員如何能監測船舶的狀況。如果沒有足夠的通道，船舶的結構狀況可能在未察覺的情況下變壞，並且可能產生重大的結構性事故。因此，需要一種涵蓋船舶整個設計綜合的船舶設計和維修保養措施。

1.3 為了解決這一問題，本組織制定了檢驗通道技術規定（以下簡稱“技術規定”），目的是為了便利出入油輪和散貨船貨物區域處所內和在這些處所的前部對《安全公約》第 II-1 章第 3-6 條提及的船舶結構進行近觀檢驗和厚度測量。這項技術規定不適用於符合《國際散化規則》規定的化學品/油混合船的液貨艙。

1.4 最好將永久性出入通道設計為船舶結構的組成部分，為了方便這樣的設計，主管機關可允許做合理的變動。

2 定義

就該技術規定而言，在經修正的《1974 年安全公約》和經修正的第 A.744（18）號大會決議確定的定義以外，還適用下列定義：

.1 *梯級*係指垂直梯的梯級或垂直面上的梯級。

.2 *踏板*係指斜梯的梯級或垂直出入開口的梯級。

.3 *斜梯的階梯* 係指斜梯的實際縱桁長度。對於垂直梯，這是指平台之間的距離。

.4 *縱桁*係指：

.1 梯的骨架；或

.2 安裝在舷殼、處所內橫向艙壁和/或縱向艙壁上的加強的水平鋼板結構。對於雙側處所寬度小於 5m 的壓載艙，水平鋼板結構屬於縱桁和縱向永久性出入裝置，如果它設有寬度 600mm 或更大的連續出入裝置，通過骨架或舷殼上的加強板或縱向艙壁。用作永久性出入通道的縱桁鋼板上的開口，應安排有護欄或格柵罩，以便保證縱桁上的安全通行或安全出入每一橫向桁材。

.5 *垂直梯*係指傾斜角度為 70°多至 90°的梯子。垂直梯偏度不應大於 2°。

.6 *頂板障礙物* 係指出入通道上方的甲板或縱桁結構，包括加強板。

.7 *天花板以下的距離* 係指鋼板以下的距離。

.8 *橫越甲板*係指位於舷內和艙口圍板之間的主甲板的橫向區域。

3 技術規定

3.1 《安全公約》第 II-1 章第 3-6 條提及的船舶結構中需要進行近觀檢驗和厚度測量的結構性構件，除雙層底處所的構件外，應設有永久性出入通道，達到適用的表 1 和表 2 中規定的標準。對於油輪和礦石船的船側壓載艙，只要結構允許，達到安全和有效使用的目的，可結合裝設的永久性出入通道使用經認可的替代方法。

3.2 永久性出入通道應儘可能成為船舶結構的組成部分，從而確保它們是堅固的，同時有助於船舶結構的整體強度。

3.3 構成永久性出入通道部分的上升通道，如果安裝的話，其最小暢通寬度應為 600mm，環繞垂直桁材的情形除外，這種情況下最小暢通寬度可減少到 450mm，並應針對其整個長度在開口側設有護欄。構成出入通道部分的傾斜結構應是不打滑的結構。護欄高度應為 1,000mm，應由扶手和高度為 500mm 的中間杆組成實質性結構。支柱的間隔不得超過 3m。

3.4 應通過易於接近的出入裝置、樓梯或踏板的形式提供從船底至永久性出入通道和垂直開口的設施。踏板應配有腳踏的橫向支撐結構。如果樓梯的梯級被安裝在垂直面上，梯級中心至垂直面的距離至少應為 150mm。如果垂直人孔是在步行水平以上高於 600mm 之處，應配有踏板和把手，兩邊應有落腳的平台，以方便出入。

3.5 永久性斜梯傾斜的角度應小於 70°。在斜梯面 750mm 內不得有障礙物，開口途中除外，淨空距離可以減少至 600mm。應提供足夠尺寸的休息平台，一般應在垂直高度最大為 6m 處設置。樓梯和扶手應為鋼結構，或由具有足夠強度的等效材料建造，並應由支柱使其安全地附着於結構之上。支撐的方法和支柱的長度，應為可使震動儘可能減到最小程度。在貨艙內，樓梯的設計和佈置應不會增加貨物裝卸的困難，並應將被貨物裝卸機械損壞的危險減少到最小。

3.6 縱桁之間斜梯的寬度不得少於 400mm。均等間隔踏板，要垂直測量，間隔距離應在 200mm 至 300mm 之間。當使用鋼材時，踏板應為兩塊方形鋼構成，截面不得小於 22mm x 22mm，形成邊緣朝上的水平梯級。踏板應延續至船側縱桁並以雙重連續焊接將其附着在結構上。所有斜梯的兩側均應配有實質性結構的扶手，安裝在踏板的上方，距離以方便為宜。

3.7 對於垂直梯或螺旋形梯，其寬度和結構應符合主管機關接受的國際標準或國家標準。

3.8 獨立便攜梯的長度不得超過 5m。

3.9 替代性出入通道包括，但不局限於下列裝置：

.1 裝有穩定底座的液壓臂；

.2 鋼索提升平台；

.3 作業架板；

.4 浮筏；

.5 自動臂或遙控操作車輛（ROV）；

.6 長度超過 5m 的便攜梯，只有裝配了機械裝置的才可使用，以便對梯子的上端進行固定；

.7 主管機關認可和接受的其他裝置。

出入和在這些處所內對這樣設備的安全操作和架設的方法應在《船舶結構出入手冊》中有明確的說明。

3.10 對於通過水平開口、艙口或人孔的通道，最小淨開口不得小於 600mm x 600mm。如果是通過貨艙的艙口出入貨艙，梯子的上端應儘可能地靠近艙口圍板。如果艙口圍板的高度大於 900mm，與梯子連接的外部還應設有梯級。

3.11 對於通過垂直開口，或人孔出入緩衝艙壁、地板、桁材以及整個處所長度和寬度都設有通道的桁材骨架，最小開口不得小於 600mm x 800mm，從通道起高度不得小於 600mm，除非已經配備了格板或其他踏板。

3.12 對於小於 5,000 載重噸的油輪，在特殊情況下，如果能證明通過開口或移動受傷人員的能力達到主管機關滿意的標準，主管機關對第 3.10 和第 3.11 段提及的開口可同意較小的尺寸。

3.13 對於散貨船，出入貨艙和其他處所的梯子：

.1 如果在相鄰甲板上表面間或甲板與貨物處所底之間的垂直距離小於 6m，應為垂直梯或斜梯。

.2 如果在相鄰甲板上表面間或甲板與貨物處所底之間的垂直距離大於 6m，應是個在貨艙一端的斜梯或系列斜梯，

除非貨艙處所最上端有 2.5m，且天花板上無障礙物以及最低處有 6m，可配有垂直梯，只要某一連接垂直梯的斜梯或系列斜梯的垂直度不小於 2.5m。

貨艙另一端的第二套出入通道可以形成系列錯位的垂直梯，應包括一個或多個連接平台的梯子，平台垂直間隔不得超過 6m，並且都設在梯子的一側。梯子的鄰近部分至少應以梯寬互相橫向偏置。直接靠近貨艙的梯子的最上端入口部分應為垂直的，高度為 2.5m，天花板上無障礙物，並與梯子連接平台相接。

.3 可使用一垂直梯作為接近舷側液貨艙的設施，在甲板與液貨艙縱向出入通道或階梯或入口下處所的底部之間的垂直距離應為 6m 或更小。水箱垂直梯最上端入口部分應是垂直的，高度為 2.5m，天花板上無障礙物，並含有一個連接平台的梯子，除非是落在縱向出入裝置上，垂直距離內的階梯或底部偏位於垂直梯的一側。

.4 除上述.3 段允許的以外，如果在甲板與入口下階梯之間、在階梯之間或在甲板或階梯與入口下處所底部之間的垂直距離大於 6m，應使用一斜梯或混合梯作為水箱或處所的出入通道。

.5 在上述.4 的情況中，梯子在甲板最上端的入口部分應是垂直的，高度為 2.5m，天花板上無障礙物，應與落腳平台連接，並以斜梯延續下去。斜梯各段的實際長度不得超過 9m，垂直高度通常不超過 6m。梯子的最下面部分可以是垂直的，距離應不小於 2.5m。

.6 在寬度小於 2.5m 的雙層殼處所中，可以通過垂直梯出入處所，應包括一個或多個連接平台的梯子，平台垂直間隔距離不得大於 6m，並且位於梯子的一側。梯子鄰近部分至少應以梯寬互相橫向偏置。

.7 可以接受螺旋梯來代替斜梯。最上端可為連續 2.5m 的螺旋梯子，不必將其改變為垂直梯。

3.14 出入液貨艙的垂直梯在甲板的最上端入口部分應是垂直的，距離為 2.5m，天花板上無障礙物，並且包括一個連接平台的梯子，平台應位於垂直梯的一側。在甲板結構以下的垂直梯，可以在 1.6m 與 3m 之間，只要它落在此範圍內的縱向或垂直於縱軸的永久性出入通道上。

表 1－油輪壓載艙和貨艙出入通道*

1 壓載水艙（右欄內規定的除外）和貨油艙	**2 構成雙舷側處所的寬度小於 5m 的舷側壓載水艙和污水底艙部分**
接近甲板下結構和垂直結構	
1.1 對於含有內部結構的高度為 6m 及以上的艙，應根據.1 至.6 裝配永久性出入通道： .1 在加強面的每個橫向艙壁上佈置連續垂直於縱	2.1 對於污底艙部分上節點以上的雙舷側處所，應根據下列.1 至.3 裝配永久性出入通道： .1 如果在水平最上端階梯

軸的永久性出入通道，在天花板下的高度，最小為 1.6m 至最大為 3m； .2 在艙的每邊至少有一個連續的縱向永久性出入通道。其中一個出入通道，在天花板下最小為 1.6m 至最大為 6m，另一個在天花板下最小為 1.6m 至最大為 3m； .3 在.1 和.2 中規定的佈置之間和從主甲板至.1 或.2 的出入通道； .4 應裝配連續縱向永久性出入通道，該通道與縱向艙壁加強面上的結構部件形成一體，如果可能，應與橫向艙壁的水平樑形成直線，以便接近橫向桁材，除非永久性裝置被安裝在最上端的平台上，作為替代裝置使用，如《技術規定》第 3.9 段所定義的，便	與天花板之間的垂直距離為 6m 或大於 6m，應裝配一個連續縱向永久性出入通道，應對艙的整個長度配備這樣的通道，以便通過橫向桁材，在天花板下最小為 1.6m 至最大為 3m，垂直出入梯置於艙的每一端； .2 連續縱向永久性出入通道與結構成為一體，垂直間隔距離不超過 6m；和 .3 鉚接階梯應儘可能與水平橫向艙壁的樑材形成直線。 2.2 對於從艙底至上節點的垂直距離為 6m 及以上的污底艙部分，應為該艙的全部長度裝配一個縱向永久性出入通道。通過該艙每端的垂直永久性出入通道可進入該通道。 2.2.1 可在污底艙部分的頂部

於中間高度的檢查； .5 對於在艙底以上有 6m 或以上的橫向連接杆的船舶，應裝配接近橫向連接杆的橫向永久性通道，便於檢查艙兩邊的連接杆外傾墊板，可從.4 中某一縱向永久性出入通道進出；和 .6 小船可裝配《技術規定》第 3.9 段所定義的替代性裝置，作為.4 中高度小於 17m 的貨油艙的替代性裝置。 1.2 對於高度小於 6m 的液艙，可使用《技術規定》第 3.9 段中定義的替代裝置或移動裝置，代替永久性出入通道。	最小 1.6m 至最大 3m 處裝配縱向連續永久性出入通道。在這種情況中，可使用寬板肋骨路徑中延伸縱向連續永久性出入通道的平台接近確定的結構臨界區域。 2.2.2 可在桁板圈暢通開口頂部以下的最小 1.2m 處裝配替代性連續縱向永久性出入通道，以便使用移動式的出入裝置到達所確定的結構臨界區域。
首尖艙 1.3 對於在防撞艙壁中線處深度為 6m 或以上的首尖艙，應配備一合適的出入通道，以便接近諸如甲板下結構、縱桁、	2.3 如果在 2.2 中提及的垂直距離小於 6m，可使用《技術規定》第 3.9 段中所定義的替代性通道或移動式的出入裝置，代替永久性出入通道。為便於

防撞艙壁和舷側結構的臨界區域。 1.3.1 對於從天花板起或從直接縱桁之上起垂直距離小於 6m 的，要考慮提供合適的出入裝置，與移動式的出入裝置一起使用。 1.3.2 如果在天花板與縱桁、縱桁或最低縱桁與艙底之間的垂直距離為 6m 或大於 6m，應裝配《技術規定》第 3.9 段所定義的替代性出入通道。	替代性出入裝置的操作，應在水平縱桁上配備系列開口。這些開口應有足夠的直徑並應有適當的護欄。

表 2－散貨船出入通道*

1 貨艙	**2 壓載艙**
接近甲板下結構 1.1 應裝配永久性出入通道，以便接近橫向甲板兩邊和中心線附近的天花板結構。無論是從貨艙或是直接從主甲板都應方便地接近每一個出入	**舷側艙** 2.1 對於高度為 6m 及以上的每一舷側艙，應沿舷側桁材裝配一縱向的永久性出入通道並安裝在甲板下最小 1.6m 至最大 3m 處，在接近該艙的每個

通道，應安裝在甲板下最小 1.6m 至最大 3m 處。 1.2 安裝在橫艙頂甲板下橫向艙壁上最小 1.6m 至最大 3m 處的橫向永久性出入通道，可接受作為 1.1 的等效方式。 1.3 接近橫向甲板的天花板結構的永久性出入通道也可通過上面的踏腳板。 1.4 對具有橫向艙壁的船舶，具有全尺寸的上踏腳板，可從主甲板接近裏邊監測所有骨架和板材，無須配備橫向甲板的永久性出入通道。 1.5 可使用替代性的移動式出入裝置接近橫向甲板的天花板結構，如果它在艙頂部上方的垂直距離為 17m 或更小。	通道附近應有一垂直出入的梯子。 2.2 如果在艙基 600mm 內整個橫向桁材上沒有配備出入孔，而且桁材骨架圈在舷側船殼和傾斜船板的路徑中桁材的高度大於 1m，則應裝配梯級階梯/扶手欄杆，以便安全通過每個橫向桁材骨架圈。 2.3 應給艙口旁縱桁裝配三個永久性出入裝置，安裝在每個艙的端底版和中間底版上，從水箱基座向上連至傾斜板的交叉之處。現有的縱向結構，如果是安裝在該處所的傾斜板上，可作為這一出入通道的一部分進行使用。 2.4 對於高度小於 6m 的舷側艙，可使用《技術規定》第 3.9 段中定義的替代性裝置或移動式裝置，代替永久性出入通道。

接近垂直結構	污水底艙
1.6 在所有貨艙中都應裝配永久性垂直出入通道，並且建在結構中，以便至少對平均分佈在全艙中左右舷艙內肋骨總數的25%進行檢查，包括橫向艙壁路徑中的每一端。但無論如何，這種佈置不得少於3個永久性垂直出入通道，安裝在每一側（艙的前後端和中跨）。在相鄰的兩個艙內肋骨之間安裝的永久性垂直出入通道可作為檢查兩個艙內肋骨的通道。可使用移動式出入裝置接近較低的壓載水艙的傾斜板。 1.7 此外，可使用輕便的或移動式出入裝置接近其餘的艙內肋骨直至其上端的墊板和橫向艙壁。 1.8 可使用輕便的或移動式出入裝置接近艙內肋骨直至其在第1.6中要求的永久性通道處所的上墊板。這些出入裝置	2.5 對於高度為 6m 及以上的每個污水底艙，應沿舷側桁材裝配一縱向的連續永久性出入通道，安裝在桁材圈通暢開口頂部下最小 1.2m 處，在每個出入污水底艙的附近有一個垂直出入梯子。 2.5.1 應在污水底艙的每一端裝配一個在縱向永久性出入通道與處所底部之間的進出梯子。 2.5.2 縱向永久性出入通道可通過桁材圈通暢開口以上的上桁材板，位於天花板以下的最小 1.6m 處，如果這種佈置方便對確定的關鍵結構區域進行適當檢查的話。對於步橋，可使用加大的縱向框架。 2.5.3 對於雙層殼散貨船，可裝配縱向連續永久性出入通道，如果與替代方法結合使用來接近節點，可設在艙底節點起 6m 之內。

應帶在船上，隨時備用。 1.9 接近艙內肋骨的垂直梯的寬度應至少為 300mm，在縱桁之間測量。 1.10 長度大於 6m 的單獨垂直梯是可以接受的，用於檢查單殼結構的艙側肋骨。 1.11 對於雙層殼結構的船舶，不需要配備檢查貨艙表面的垂直梯。應在雙層殼處所內配備檢查這種結構的方式。	2.6 如果在艙底座 600mm 之內整個橫向環行桁材上並未裝配出入孔以及桁材框架圈在舷側船殼和傾斜板的路徑中桁材高度大於 1m，那麼，應配備梯級階梯/扶手護欄，以便安全通過每個橫向桁材框架圈。 2.7 對於高度小於 6m 的污水底艙，可使用《技術規定》第 3.9 段定義的替代性裝置或輕便的裝置，代替永久性出入通道。應能夠表明這種裝置，在需要區域可隨時使用。 **雙層殼艙** 2.8 應根據表 1 的適用部分設置永久性出入通道。
	首尖艙 2.9 對於在防撞艙壁中心線深度為 6m 或以上的首尖艙，應裝配適當的出入通道，以便接近諸如甲板下結構、縱桁、防撞艙壁和舷側船殼的關鍵區域。

	2.9.1 對於從天花板起或在縱桁之上垂直距離小於 6m 的縱桁，要考慮設置與輕便的出入裝置一起使用的設置。 2.9.2 如果天花板與縱桁、縱桁或最低縱桁與艙底之間的垂直距離為 6m 或以上，應裝配《技術規定》第 3.9 段中定義的替代性出入裝置。

* 對於礦石船，應根據表 1 和表 2 的適用部分裝配永久性出入通道。”

RESOLUTION MSC.158(78)
(adopted on 20 May 2004)

ADOPTION OF AMENDMENTS TO THE TECHNICAL PROVISIONS FOR MEANS OF ACCESS FOR INSPECTIONS

THE MARITIME SAFETY COMMITTEE,

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

NOTING the Technical provisions for means of access for inspections (hereinafter referred to as "the Technical provisions"), adopted by resolution MSC.133(76), which are mandatory under SOLAS regulation II-1/3-6 on Access to and within spaces in the cargo area of oil tankers and bulk carriers adopted by resolution MSC.134(76),

ACKNOWLEDGING concerns expressed with regard to perceived problems which might be encountered when implementing the requirements of the Technical provisions,

NOTING ALSO the amendments to the aforementioned SOLAS regulation II-1/3-6 adopted by resolution MSC.151(78) to address the above concerns,

HAVING CONSIDERED, at its seventy-eighth session, amendments to the Technical provisions, prepared and circulated in accordance with article VIII and regulation II-1/3-6 of the 1974 SOLAS Convention,

1. ADOPTS amendments to the Technical provisions for means of access for inspections, 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 said amendments shall be deemed to have been accepted on 1 July 2005, 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 SOLAS Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2006 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General to transmit certified copies of this resolution and the text of the Technical provisions contained in the Annex to all Contracting Governments to the Convention;

5. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and the Annex to all Members of the Organization, which are not Contracting Governments to the Convention.

ANNEX

AMENDMENTS TO THE TECHNICAL PROVISIONS FOR MEANS OF ACCESS FOR INSPECTIONS (RESOLUTION MSC.133(76))

1 The existing text of the Technical provisions for means of access for inspections is replaced with the following:

"**1 Preamble**

1.1 It has long been recognized that the only way of ensuring that the condition of a ship's structure is maintained to conform with the applicable requirements is for all its components to be surveyed on a regular basis throughout their operational life. This will ensure that they are free from damage such as cracks, buckling or deformation due to corrosion, overloading, or contact damage and that thickness diminution is within established limits. The provision of suitable means of access to the hull structure for the purpose of carrying out overall and close-up surveys and inspections is essential and such means should be considered and provided for at the ship design stage.

1.2 Ships should be designed and built with due consideration as to how they will be surveyed by flag State inspectors and classification society surveyors during their in-service life and how the crew will be able to monitor the condition of the ship. Without adequate access, the structural condition of the ship can deteriorate undetected and major structural failure can arise. A comprehensive approach to design and maintenance is required to cover the whole projected life of the ship.

1.3 In order to address this issue, the Organization has developed these Technical provisions for means of access for inspections (hereinafter called the "Technical provisions"), intended to facilitate close-up inspections and thickness measurements of the ship's structure referred to in SOLAS regulation II-1/3-6 on Access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers. The Technical provisions do not apply to the cargo tanks of combined chemical/oil tankers complying with the provisions of the IBC Code.

1.4 Permanent means of access which are designed to be integral parts of the structure itself are preferred and Administrations may allow reasonable deviations to facilitate such designs.

2 Definitions

For the purpose of these Technical provisions, the following definitions apply in addition to those provided in the 1974 SOLAS Convention, as amended, and in resolution A.744(18), as amended:

.1 *Rung* means the step of a vertical ladder or step on the vertical surface.

.2 *Tread* means the step of an inclined ladder or step for the vertical access opening.

.3 *Flight of an inclined ladder* means the actual stringer length of an inclined ladder. For vertical ladders, it is the distance between the platforms.

.4 *Stringer* means:

.1 the frame of a ladder; or

.2 the stiffened horizontal plating structure fitted on the side shell, transverse bulkheads and/or longitudinal bulkheads in the space. For the purpose of ballast tanks of less than 5 m width forming double side spaces, the horizontal plating structure is credited as a stringer and a longitudinal permanent means of access, if it provides a continuous passage of 600 mm or more in width past frames or stiffeners on the side shell or longitudinal bulkhead. Openings in stringer plating utilized as permanent means of access shall be arranged with guard rails or grid covers to provide safe passage on the stringer or safe access to each transverse web.

.5 *Vertical ladder* means a ladder of which the inclined angle is 70° and over up to 90°. A vertical ladder shall not be skewed by more than 2°.

.6 *Overhead obstructions* mean the deck or stringer structure including stiffeners above the means of access.

.7 *Distance below deck head* means the distance below the plating.

.8 *Cross deck* means the transverse area of the main deck which is located inboard and between hatch coamings.

3 Technical provisions

3.1 Structural members subject to the close-up inspections and thickness measurements of the ship's structure referred to in SOLAS regulation II-1/3-6, except those in double bottom spaces, shall be provided with a permanent means of access to the extent as specified in table 1 and table 2, as applicable. For oil tankers and wing ballast tanks of ore carriers, approved alternative methods may be used in combination with the fitted permanent means of access, provided that the structure allows for its safe and effective use.

3.2 Permanent means of access should as far as possible be integral to the structure of the ships, thus ensuring that they are robust and at the same time contributing to the overall strength of the structure of the ship.

3.3 Elevated passageways forming sections of a permanent means of access, where fitted, shall have a minimum clear width of 600 mm, except for going around vertical

webs where the minimum clear width may be reduced to 450 mm, and have guard rails over the open side of their entire length. Sloping structures providing part of the access shall be of a non-skid construction. Guard rails shall be 1,000 mm in height and consist of a rail and an intermediate bar 500 mm in height and of substantial construction. Stanchions shall be not more than 3 m apart.

3.4 Access to permanent means of access and vertical openings from the ship's bottom shall be provided by means of easily accessible passageways, ladders or treads. Treads shall be provided with lateral support for the foot. Where the rungs of ladders are fitted against a vertical surface, the distance from the centre of the rungs to the surface shall be at least 150 mm. Where vertical manholes are fitted higher than 600 mm above the walking level, access shall be facilitated by means of treads and hand grips with platform landings on both sides.

3.5 Permanent inclined ladders shall be inclined at an angle of less than 70°. There shall be no obstructions within 750 mm of the face of the inclined ladder, except that in way of an opening this clearance may be reduced to 600 mm. Resting platforms of adequate dimensions shall be provided, normally at a maximum of 6 m vertical height. Ladders and handrails shall be constructed of steel or equivalent material of adequate strength and stiffness and securely attached to the structure by stays. The method of support and length of stay shall be such that vibration is reduced to a practical minimum. In cargo holds, ladders shall be designed and arranged so that cargo handling difficulties are not increased and the risk of damage from cargo handling gear is minimized.

3.6 The width of inclined ladders between stringers shall not be less than 400 mm. The treads shall be equally spaced at a distance apart, measured vertically, of between 200 mm and 300 mm. When steel is used, the treads shall be formed of two square bars of not less than 22 mm by 22 mm in section, fitted to form a horizontal step with the edges pointing upward. The treads shall be carried through the side stringers and attached thereto by double continuous welding. All inclined ladders shall be provided with handrails of substantial construction on both sides, fitted at a convenient distance above the treads.

3.7 For vertical ladders or spiral ladders, the width and construction should be in accordance with international or national standards accepted by the Administration.

3.8 No free-standing portable ladder shall be more than 5 m long.

3.9 Alternative means of access include, but are not limited to, such devices as:

.1 hydraulic arm fitted with a stable base;

.2 wire lift platform;

.3 staging;

.4 rafting;

.5 robot arm or remotely operated vehicle (ROV);

.6 portable ladders more than 5 m long shall only be utilized if fitted with a mechanical device to secure the upper end of the ladder;

.7 other means of access, approved by and acceptable to the Administration.

Means for safe operation and rigging of such equipment to and from and within the spaces shall be clearly described in the Ship Structure Access Manual.

3.10 For access through horizontal openings, hatches or manholes, the minimum clear opening shall not be less than 600 mm x 600 mm. When access to a cargo hold is arranged through the cargo hatch, the top of the ladder shall be placed as close as possible to the hatch coaming. Access hatch coamings having a height greater than 900 mm shall also have steps on the outside in conjunction with the ladder.

3.11 For access through vertical openings, or manholes, in swash bulkheads, floors, girders and web frames providing passage through the length and breadth of the space, the minimum opening shall be not less than 600 mm x 800 mm at a height of not more than 600 mm from the passage unless gratings or other foot holds are provided.

3.12 For oil tankers of less than 5,000 tonnes deadweight, the Administration may approve, in special circumstances, smaller dimensions for the openings referred to in paragraphs 3.10 and 3.11, if the ability to traverse such openings or to remove an injured person can be proved to the satisfaction of the Administration.

3.13 For bulk carriers, access ladders to cargo holds and other spaces shall be:

.1 Where the vertical distance between the upper surface of adjacent decks or between deck and the bottom of the cargo space is not more than 6 m, either a vertical ladder or an inclined ladder.

.2 Where the vertical distance between the upper surface of adjacent decks or between deck and the bottom of the cargo space is more than 6 m, an inclined ladder or series of inclined ladders at one end of the cargo hold, except the uppermost 2.5 m of a cargo space measured clear of overhead obstructions and the lowest 6 m may have vertical ladders, provided that the vertical extent of the inclined ladder or ladders connecting the vertical ladders is not less than 2.5 m.

The second means of access at the other end of the cargo hold may be formed of a series of staggered vertical ladders, which should comprise of one or more ladder linking platforms spaced not more than 6 m apart vertically and displaced to one side of the ladder. Adjacent sections of ladder should be laterally offset from each other by at least the width of the ladder. The uppermost entrance section of the ladder directly exposed to a cargo hold should be vertical for a distance of 2.5 m measured clear of overhead obstructions and connected to a ladder-linking platform.

.3 A vertical ladder may be used as a means of access to topside tanks, where the vertical distance is 6 m or less between the deck and the longitudinal means of access in the tank or the stringer or the bottom of the space

immediately below the entrance. The uppermost entrance section from deck of the vertical ladder of the tank should be vertical for a distance of 2.5 m measured clear of overhead obstructions and comprise a ladder linking platform, unless landing on the longitudinal means of access, the stringer or the bottom within the vertical distance, displaced to one side of a vertical ladder.

.4 Unless allowed in .3 above, an inclined ladder or combination of ladders should be used for access to a tank or a space where the vertical distance is greater than 6 m between the deck and a stringer immediately below the entrance, between stringers, or between the deck or a stringer and the bottom of the space immediately below the entrance.

.5 In case of .4 above, the uppermost entrance section from deck of the ladder should be vertical for a distance of 2.5 m clear of overhead obstructions and connected to a landing platform and continued with an inclined ladder. The flights of inclined ladders should not be more than 9 m in actual length and the vertical height should not normally be more than 6 m. The lowermost section of the ladders may be vertical for a distance of not less than 2.5 m.

.6 In double-side skin spaces of less than 2.5 m width, the access to the space may be by means of vertical ladders that comprise of one or more ladder linking platforms spaced not more than 6 m apart vertically and displaced to one side of the ladder. Adjacent sections of ladder should be laterally offset from each other by at least the width of the ladder.

.7 A spiral ladder is considered acceptable as an alternative for inclined ladders. In this regard, the uppermost 2.5 m can continue to be comprised of the spiral ladder and need not change over to vertical ladders.

3.14 The uppermost entrance section from deck of the vertical ladder providing access to a tank should be vertical for a distance of 2.5 m measured clear of overhead obstructions and comprise a ladder linking platform, displaced to one side of a vertical ladder. The vertical ladder can be between 1.6 m and 3 m below deck structure if it lands on a longitudinal or athwartship permanent means of access fitted within that range.

Table 1 - Means of access for ballast and cargo tanks of oil tankers*

1 Water ballast tanks, except those specified in the right column, and cargo oil tanks	2 Water ballast wing tanks of less than 5 m width forming double side spaces and their bilge hopper sections
Access to the underdeck and vertical structure	
1.1 For tanks of which the height is 6 m and over containing internal structures, permanent means of access shall be provided in accordance with .1 to .6: .1 continuous athwartship permanent access arranged at each transverse bulkhead on the stiffened surface, at a minimum of 1.6 m to a maximum of 3 m below the deck head; .2 at least one continuous longitudinal permanent means of access at each side of the tank. One of these accesses shall be at a minimum of 1.6 m to a maximum of 6 m below the deck head and the other shall be at a minimum of 1.6 m to a maximum of 3 m below the deck head; .3 access between the arrangements specified in .1 and .2 and from the main deck to either .1 or .2; .4 continuous longitudinal permanent means of access which are integrated in the structural member on the stiffened surface of a longitudinal bulkhead, in alignment, where possible, with horizontal girders of transverse bulkheads are to be provided for access to the transverse webs unless permanent fittings are installed at the uppermost platform for use of alternative means, as defined in paragraph 3.9 of the Technical provisions, for inspection at intermediate heights; .5 for ships having cross-ties which are 6 m or more above tank bottom, a transverse permanent means of access on the cross-ties providing inspection of the tie flaring brackets at both sides of the tank, with access from one of the longitudinal permanent means of access in .4; and .6 alternative means as defined in paragraph 3.9 of the Technical provisions may be provided for small ships as an alternative to .4 for cargo oil tanks of which the height is less than 17 m.	2.1 For double side spaces above the upper knuckle point of the bilge hopper sections, permanent means of access are to be provided in accordance with .1 to .3: .1 where the vertical distance between horizontal uppermost stringer and deck head is 6 m or more, one continuous longitudinal permanent means of access shall be provided for the full length of the tank with a means to allow passing through transverse webs installed at a minimum of 1.6 m to a maximum of 3 m below the deck head with a vertical access ladder at each end of the tank; .2 continuous longitudinal permanent means of access, which are integrated in the structure, at a vertical distance not exceeding 6 m apart; and .3 plated stringers shall, as far as possible, be in alignment with horizontal girders of transverse bulkheads.

1.2 For tanks of which the height is less than 6 m, alternative means as defined in paragraph 3.9 of the Technical provisions or portable means may be utilized in lieu of the permanent means of access.	2.2 For bilge hopper sections of which the vertical distance from the tank bottom to the upper knuckle point is 6 m and over, one longitudinal permanent means of access shall be provided for the full length of the tank. It shall be accessible by vertical permanent means of access at each end of the tank. 2.2.1 The longitudinal continuous permanent means of access may be installed at a minimum 1.6 m to maximum 3 m from the top of the bilge hopper section. In this case, a platform extending the longitudinal continuous permanent means of access in way of the webframe may be used to access the identified structural critical areas. 2.2.2 Alternatively, the continuous longitudinal permanent means of access may be installed at a minimum of 1.2 m below the top of the clear opening of the web ring allowing a use of portable means of access to reach identified structural critical areas.
Fore peak tanks 1.3 For fore peak tanks with a depth of 6 m or more at the centre line of the collision bulkhead, a suitable means of access shall be provided for access to critical areas such as the underdeck structure, stringers, collision bulkhead and side shell structure. 1.3.1 Stringers of less than 6 m in vertical distance from the deck head or a stringer immediately above are considered to provide suitable access in combination with portable means of access. 1.3.2 In case the vertical distance between the deck head and stringers, stringers or the lowest stringer and the tank bottom is 6 m or more, alternative means of access as defined in paragraph 3.9 of the Technical provisions shall be provided.	2.3 Where the vertical distance referred to in 2.2 is less than 6 m, alternative means as defined in paragraph 3.9 of the Technical provisions or portable means of access may be utilised in lieu of the permanent means of access. To facilitate the operation of the alternative means of access, in-line openings in horizontal stringers shall be provided. The openings shall be of an adequate diameter and shall have suitable protective railings.

Table 2 - Means of access for bulk carriers*

1 Cargo holds	2 Ballast tanks
Access to underdeck structure 1.1 Permanent means of access shall be fitted to provide access to the overhead structure at both sides of the cross deck and in the vicinity of the centreline. Each means of access shall be accessible from the cargo hold access or directly from the main deck and installed at a minimum of 1.6 m to a maximum of 3 m below the deck. 1.2 An athwartship permanent means of access fitted on the transverse bulkhead at a minimum 1.6 m to a maximum 3 m below the cross-deck head is accepted as equivalent to 1.1. 1.3 Access to the permanent means of access to overhead structure of the cross deck may also be via the upper stool. 1.4 Ships having transverse bulkheads with full upper stools with access from the main deck which allows monitoring of all framing and plates from inside do not require permanent means of access of the cross deck. 1.5 Alternatively, movable means of access may be utilized for access to the overhead structure of the cross deck if its vertical distance is 17 m or less above the tank top.	**Top side tanks** 2.1 For each topside tank of which the height is 6 m and over, one longitudinal continuous permanent means of access shall be provided along the side shell webs and installed at a minimum of 1.6 m to a maximum of 3 m below deck with a vertical access ladder in the vicinity of each access to that tank. 2.2 If no access holes are provided through the transverse webs within 600 mm of the tank base and the web frame rings have a web height greater than 1 m in way of side shell and sloping plating, then step rungs/grab rails shall be provided to allow safe access over each transverse web frame ring. 2.3 Three permanent means of access, fitted at the end bay and middle bay of each tank, shall be provided spanning from tank base up to the intersection of the sloping plate with the hatch side girder. The existing longitudinal structure, if fitted on the sloping plate in the space may be used as part of this means of access. 2.4 For topside tanks of which the height is less than 6 m, alternative means as defined in paragraph 3.9 of the Technical provisions or portable means may be utilized in lieu of the permanent means of access.
Access to vertical structures 1.6 Permanent means of vertical access shall be provided in all cargo holds and built into the structure to allow for an inspection of a minimum of 25 % of the total number of hold frames port and starboard equally distributed throughout the hold including at each end in way of transverse bulkheads. But in no circumstance shall this arrangement be less than 3 permanent means of vertical access fitted to each side (fore and aft ends of hold and mid-span). Permanent means of vertical access fitted between two adjacent hold frames is counted for an access for the inspection of both hold frames. A means of portable access may be used to gain access over the sloping plating of lower hopper ballast tanks. 1.7 In addition, portable or movable means of access shall be utilized for access to the remaining hold frames up to their upper brackets and transverse bulkheads.	**Bilge hopper tanks** 2.5 For each bilge hopper tank of which the height is 6 m and over, one longitudinal continuous permanent means of access shall be provided along the side shell webs and installed at a minimum of 1.2 m below the top of the clear opening of the web ring with a vertical access ladder in the vicinity of each access to the tank. 2.5.1 An access ladder between the longitudinal continuous permanent means of access and the bottom of the space shall be provided at each end of the tank. 2.5.2 Alternatively, the longitudinal continuous permanent means of access can be located through the upper web plating above the clear opening of the web ring, at a minimum of 1.6 m below the deck head, when this arrangement facilitates more suitable inspection of identified structurally critical areas. An enlarged longitudinal frame can be used for the purpose of the walkway.

1.8 Portable or movable means of access may be utilized for access to hold frames up to their upper bracket in place of the permanent means required in 1.6. These means of access shall be carried on board the ship and readily available for use. 1.9 The width of vertical ladders for access to hold frames shall be at least 300 mm, measured between stringers. 1.10 A single vertical ladder over 6 m in length is acceptable for the inspection of the hold side frames in a single skin construction. 1.11 For double-side skin construction no vertical ladders for the inspection of the cargo hold surfaces are required. Inspection of this structure should be provided from within the double hull space.	2.5.3 For double-side skin bulk carriers, the longitudinal continuous permanent means of access may be installed within 6 m from the knuckle point of the bilge, if used in combination with alternative methods to gain access to the knuckle point. 2.6 If no access holes are provided through the transverse ring webs within 600 mm of the tank base and the web frame rings have a web height greater than 1 m in way of side shell and sloping plating, then step rungs/grab rails shall be provided to allow safe access over each transverse web frame ring. 2.7 For bilge hopper tanks of which the height is less than 6 m, alternative means as defined in paragraph 3.9 of the Technical provisions or portable means may be utilized in lieu of the permanent means of access. Such means of access shall be demonstrated that they can be deployed and made readily available in the areas where needed. **Double-skin side tanks** 2.8 Permanent means of access shall be provided in accordance with the applicable sections of table 1.
	Fore peak tanks 2.9 For fore peak tanks with a depth of 6 m or more at the centreline of the collision bulkhead, a suitable means of access shall be provided for access to critical areas such as the underdeck structure, stringers, collision bulkhead and side shell structure. 2.9.1 Stringers of less than 6 m in vertical distance from the deck head or a stringer immediately above are considered to provide suitable access in combination with portable means of access. 2.9.2 In case the vertical distance between the deck head and stringers, stringers or the lowest stringer and the tank bottom is 6 m or more, alternative means of access as defined in paragraph 3.9 of the Technical provisions shall be provided.

* For ore carriers, permanent means of access shall be provided in accordance with the applicable sections of table 1 and table 2."

***

第 89/2014 號行政長官公告

莫桑比克共和國政府與中華人民共和國政府以換文方式就莫桑比克共和國在中華人民共和國澳門特別行政區設立總領事館達成協議。按照中央人民政府的命令，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，命令公佈莫桑比克共和國政府照會的英文正式文本及中華人民共和國政府照會的中文正式文本。

根據上述協議，有關莫桑比克共和國在澳門特別行政區保留名譽領事館的協議，自本協議生效之日起即行終止。

本協議自二零一四年三月三十一日起生效。

二零一四年十一月五日發佈。

行政長官　崔世安

Aviso do Chefe do Executivo n.º 89/2014

O Governo da República de Moçambique e o Governo da República Popular da China concluíram, por troca de notas, o acordo relativo ao estabelecimento do Consulado Geral da República de Moçambique na Região Administrativa Especial de Macau da República Popular da China. Neste sentido, 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, por ordem do Governo Popular Central, a Nota do Governo da República de Moçambique no seu texto autêntico em língua inglesa e a Nota do Governo da República Popular da China no seu texto autêntico em língua chinesa.

Em conformidade com o disposto no referido acordo, o acordo relativo à manutenção do Posto Consular Honorário da República de Moçambique na Região Administrativa Especial de Macau cessa a sua vigência na data em que o presente acordo entre em vigor.

O presente acordo entrou em vigor em 31 de Março de 2014.

Promulgado em 5 de Novembro de 2014.

O Chefe do Executivo, *Chui Sai On*.

中華人民共和國二〇一四年三月三十一日照會

……

中華人民共和國外交部向莫桑比克共和國駐華大使館致意，並謹確認收到大使館二〇一四年一月二十三日第 052/Gemb/2014 號照會，內容如下：

“莫桑比克共和國駐華大使館向中華人民共和國外交部致意，並謹代表莫桑比克共和國政府確認，莫桑比克共和國政府和中華人民共和國政府本着進一步發展兩國友好關係的共同願望，經過友好協商，就莫桑比克共和國在澳門特別行政區設立總領事館達成協議如下：

一、中華人民共和國政府同意莫桑比克共和國在澳門特別行政區設立總領事館，領區為澳門特別行政區。

二、莫桑比克共和國政府同意中華人民共和國保留在莫桑比克共和國設立領事機構的權利。設領地點、領區範圍等事宜，雙方將通過外交途徑另行商定。

三、雙方將根據一九六三年四月二十四日《維也納領事關係公約》以及兩國各自有關的法律規定和對等原則，為對方在本國設立領事機構和執行領事職務提供必要的協助和便利。

四、雙方將根據包括一九六三年四月二十四日《維也納領事關係公約》在內的國際法及國際慣例，並本着對等原則，通過友好協商解決兩國領事關係中可能出現的問題。

上述內容如蒙中華人民共和國外交部代表中華人民共和國政府覆照確認，本照會和外交部的覆照即構成莫桑比克共和國政府和中華人民共和國政府間的一項協議，並自外交部覆照之日起生效。自本協議生效之日起，兩國政府於一九九九年三月十七日、一九九九年四月十二日以換文形式就莫桑比克共和國在澳門保留名譽領事館達成的協議即行終止。”

中華人民共和國外交部謹代表中華人民共和國政府確認，同意上述照會內容。

……

Ref: 052 / Gemb / 2014 Date: January 23rd 2014

The Embassy of the Republic of Mozambique accredited to the People's Republic of China presents its compliments to the Ministry of Foreign Affairs of the People's Republic of China and has the honour to confirm on behalf of the Government of the Republic of Mozambique and the Government of the People's Republic of China, in the common desire to further promote the friendly relations between the two countries, have reached through friendly consultations the following agreement on the establishment of the Consulate-General of the Republic of Mozambique in Macao:

1. The Government of the People's Republic of China agrees to the establishment of the Consulate-General of the Republic of Mozambique in Macao with its consular district covering Macao Special Administrative Region.

2. The Government of the Republic of Mozambique agrees that the People's Republic of China reserves the right to establish a new consular post in the Republic of Mozambique. Its location and the consular district will be decided through diplomatic channels.

3. The two sides shall provide each other with necessary assistance and facilitation for the establishment of the above-mentioned consular posts and the exercise of their consular functions in accordance with the Vienna Convention on Consular Relations of April 24, 1963, the relevant laws and regulations of the two countries and the principle of reciprocity.

4. The two sides shall resolve any issue that may arise in consular relations between the two countries through friendly consultations in accordance with the principle of reciprocity, international law, including the Vienna Convention on Consular Relations of April 24, 1963, and international practices.

If the above-mentioned content is confirmed in a note of reply by the Ministry of Foreign Affairs of the People's Republic of China on behalf of the Government of the People's Republic of China, this note and the note of reply from the Ministry of Foreign Affairs of the People's Republic of China shall constitute an agreement

between the Government of the Republic of Mozambique and the Government of the People's Republic of China, which shall enter into force on the date of the note of reply from the Ministry of Foreign Affairs. As of the date that the agreement put into force, the agreement regarding reserving the Honorary Consulate in Macao Special Administrative Region reached on March 17, 1999 and April 12, 1999 between the two government will be terminated.

The Embassy of the Republic of Mozambique in China avails itself of this opportunity to renew to the Ministry of Foreign Affairs of the People's Republic of China the assurances of its highest consideration.

二零一四年十一月五日於行政長官辦公室

辦公室主任　譚俊榮

Gabinete do Chefe do Executivo, aos 5 de Novembro de 2014. — O Chefe do Gabinete, *Alexis, Tam Chon Weng.*

印務局
Imprensa Oficial
每份售價 $321.00
PREÇO DESTE NÚMERO $ 321,00