

- (g) Contracting Governments shall adhere to the measures adopted by the Organization concerning ships' routing. They shall promulgate all information necessary for the safe and effective use of adopted ships' routing systems. A Government or Governments concerned may monitor traffic in those systems. Contracting Governments will do everything in their power to secure the appropriate use of ships' routing systems adopted by the Organization.
- (h) A ship shall use a mandatory ships' routing system adopted by the Organization as required for its category or cargo carried and in accordance with the relevant provisions in force unless there are compelling reasons not to use a particular ships' routing system. Any such reason shall be recorded in the ship's log.
- (i) Mandatory ships' routing systems shall be reviewed by the Contracting Government or Governments concerned in accordance with the guidelines and criteria developed by the Organization.
- (j) All adopted ships' routing systems and actions taken to enforce compliance with those systems shall be consistent with international law, including the relevant provisions of the 1982 United Nations Convention on the Law of the Sea.
- (k) Nothing in this regulation nor its associated guidelines and criteria shall prejudice the rights and duties of Governments under international law or the legal regime of international straits."

第 74/2014 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一九九二年十二月十一日透過第MSC.27(61)號決議通過了公約的修正案；

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

基於此，行政長官根據澳門特別行政區第3/1999號法律第六條第一款的規定，命令公佈包含上指修正案的MSC.27(61)號決議的中文及英文正式文本。

二零一四年十月二十日發佈。

行政長官 崔世安

Aviso do Chefe do Executivo n.º 74/2014

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 Dezembro de 1992, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.27(61), 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.27(61), que contém as referidas emendas, nos seus textos autênticos em línguas chinesa e inglesa.

Promulgado em 20 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.27 (61) 號決議

(1992 年 12 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，

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)有關修正該公約第 I 章規定的程序的第 VIII (b) 條，

在其第六十一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. 按本公約第 VIII (b) (iv) 條通過了本公約修正案，其條文載於本決議的附件中；
2. 按本公約第 VIII (b) (vi) (2) (bb) 條決定：除非在 1994 年 4 月 1 日前有超過三分之一的本公約締約政府作出反對這些修正案的
通知，或其合計商船隊的總噸位不少於全球商船隊 50% 的締約政府作出了此種通知，否則這些修正案在該日期應視為已獲接受；
3. 請締約政府注意，按本公約第 VIII (b) (vii) (2) 條，這此修正案，在按第 2 款獲得接受後，將於 1994 年 10 月 1 日生效；
4. 要求秘書長按照本公約第 VIII (b) (v) 條，將本決議的核證副本和附件中所載的修正案條文轉發本公約的所有締約政府；

5. 還要求秘書長將本決議的副本轉發非本公約締約政府的本組織會員。

附件

《1974 年安全公約》修正案

油輪貨物區域內各處所的通道

1 在第 II-1/2 條第 11 款後加入下列條款：

“12 油輪係指《1973 年國際防止船舶造成海洋污染公約》的《1978 年議定書》附件 I 第 1 條中作出定義的油輪。”

2 加入新的第 II-1/12-2 條：

“第 12-2 條油輪貨物區域內各處所的通道

1 本條適用於在 1994 年 10 月 1 日或以後建造的油輪。

2 貨物區域內的空隔艙、壓載艙、貨艙和其他處所的通道應直通露天甲板並應保證得到完整的檢查。雙層底處所的通道可以穿過貨泵艙、泵艙、深空隔艙、管隧或類似艙室，但應考慮到通風問題。

3 對於穿過開口、艙口或人孔的通道，其尺寸應足以使帶有獨立呼吸器和保護設備的人員能無障礙地爬上和爬下任何梯子，也足以提供無障礙的開口以便利將受傷人員從處所底部吊起，最小的無障礙開口不應小於 600 毫米×600 毫米。

4 對於穿過垂直開口的通道或用作提供穿越整個處所的通道的人孔，其最小無障礙開口應不小於 600 毫米×800 毫米；除裝有格子板或其他踏板者外，其在底殼板之上的高度不應大於 600 毫米。

5 對於不足 5,000 載重噸的油輪，如能證明通過較小開口的能力或轉移受傷人員的能力達到主管機關要求，則主管機關在特殊情況下可以認可此種較小尺寸的開口。

第 II-1/37 條—駕駛台與機械處所間的通信

3 將現有條款編為第 1 款，並加上下列條款：

“2. 對於在 1994 年 10 月 1 日及以後建造的船舶，以下列要求代替第 1 款的規定：

至少應提供兩個獨立的裝置將指令從駕駛台傳送到機器處所或控制室中對航速和推進器的推進方向進行控制的位置。其中之一應是機艙車鐘，它在機械處所和駕駛台上都對指令和回應作出視覺指示。應提供適當通訊裝置供從駕駛台和機艙向可對航速和推進器推進方向進行控制的任何位置發佈指令。”

第 II-1/42 條—客船上的應急電源

4 在第 II-1/42 條第 3.2 款後插入下款：

“3.3 第 3.1.2 款中的下述規定不適用於在 1994 年 10 月 1 日或以後建造的船舶：

除非配有用以起動應急發電機組的第二個獨立裝置，否則應對單一的儲存能源作出保護，防止自動起動系統將其完全耗竭。”

第 II-1/43 條—貨船上的應急電源

5 在第 II-1/43 條第 3.2 款後插入下款：

“3.3 第 3.1.2 款中的下述規定不適用於在 1994 年 10 月 1 日或以後建造的船舶：

除非配有用以起動應急發電機組的第二個獨立裝置，否則應對單一的儲存能源作出保護，防止自動起動系統將其完全耗竭。”

第 II-1/44 條—應急發電機組的起動裝置

6 在第 II-1/44 條第 2 款後插入下款：

“2.1 在 1994 年 10 月 1 日或以後建造的船舶，應符合取代第 2 款第 2 句規定的下列要求：

除非配有第二個獨立起動裝置，否則應對儲存能源作出保護，防止自動起動系統將其嚴重耗竭。此外，除非證明手動起動是有效的，否則應配有第二個能源，供在 30 分鐘內進行另外三次起動。”

第 II-1/45 條—防止電擊、失火和其他電氣危險的措施

7 在第 II-1/45 條第 3.2 款後插入下述條文：

“3.2-1 對於在 1994 年 10 月 1 日或以後建造的船舶，第 3.1 款的要求不排除使用有限的並有局部接地的系統，但可能產生的任何電流不應直接通過任何危險處所。”

8 在第 4.2 款後插入下款：

“4.3 在 1994 年 10 月 1 日或以後建造的船舶應符合取代第 4.1 款規定的下列要求：

- .1 除第 4.3.2 款允許者外，不應在液貨船中使用接地的分配系統。

- .2 第 4.3.1 款的要求不排除使用接地的、有內在安全性的電路；在主管機關認可的條件下也不排除使用下列接地的系統：
- .2.1 因技術或安全原因而不能使用無接地系統的帶電的控制線路和儀錶線路，但在正常和故障狀況下，船體中的電流應限於不超過 5 安培；或
- .2.2 有限的局部接地系統，但由此產生的任何可能的電流不應直接通過任何危險處所；或
- .2.3 1,000 伏均方根（線對線）和更大的交流電電網，但由此產生的任何可能的電流不應直接通過任何危險處所。”

第 II-2 章關於新船防火保護要求的修正案

第 II-2/1 條—適用範圍

9 將第 1.1 條更改為：

“1.1 除另有明文規定者外，本章 A、C 和 D 部分應適用於在 1986 年 7 月 1 日或以後鋪設龍骨或處於相似建造階段的船舶；本章 B 部分應適用於在 1994 年 10 月 1 日或以後鋪設龍骨或處於相似建造階段的船舶。”

10 在第 2 款的原句後加上下列條文：

“對 1994 年 10 月 1 日前建造的船舶，主管機關應確保其符合經第 MSC.1 (XLV)、MSC.6 (48)、MSC.13 (57)、MSC.22 (59) 和 MSC.24 (60) 號決議修正的《1974 年國際海上人命安全公約》第 II-2 章 B 部分的適用要求。”

第 II-2/3 號決議 – 定義

11 增加新的第 33 款，條文如下：

“33 對在 1994 年 10 月 1 日或以後建造的船舶，應使用下列定義取代第 9 款中規定的對主垂直區域的定義：

主垂直區域是船體、上層建築和甲板室中由 A 級分隔隔開的部分；其在任何甲板上的寬度一般不應超過 40 米。”

消防總管和消防泵的尺寸

第 II-2/4.4.2 條

12 在第 4.2 款後加上下列新條文：

“4.2.1 在 1994 年 10 月 1 日或以後建造的客船，應符合取代第 4.2 款規定的下列要求：

在兩個泵同時通過第 8 款規定的噴嘴進行輸送並有足夠消防栓供第 4.1 款中規定的水量使用時，所有消防栓應保持的最小壓力，對於 4,000 總噸和更大的船舶為 0.4 牛／毫米²；對於不足 4,000 總噸的船舶為 0.3 牛／毫米²。”

第 II-2/4.3.3.3

13 在第 3.3.3 款後加上下列條文：

“3.3.3.1 對在 1994 年 10 月 1 日或以後建造的船舶，按第 3.3.3 款規定提供的替代裝置應是獨立驅動的電動應急消防泵，其電源和通海接頭應位於機器處所之外。”

第 II-2/4.3.3.2.9 條

14 在第 3.3.2.8 款後加上下列條文：

“3.3.2.9 在 1994 年 10 月 1 日或以後建造的船舶，應符合取代第 3.3.2.6 款規定的下列要求：

有消防泵的處所應與 A 類機器處所或有主消防泵的處所的邊界鄰接。在這樣做行不通時，兩個處所的共用艙壁應按第 44 條中對控制位置所要求者相等的結構性防火保護標準進行絕緣。”

二氧化碳的釋放裝置

15 在第 II-2/5 條第 2.4 款後加上下述各款：

“2.5 在 1994 年 10 月 1 日或以後安裝的二氧化碳系統，應符合下列要求：

- .1 應配有兩個分開的控制裝置將二氧化碳釋放到作出保護的處所內並應確保激發警報器。一個控制裝置應用於將氣體從儲藏容器中釋放。第二個控制裝置應用於打開將氣體輸入到作出了保護的處所的管道的閥門。
- .2 這兩個控制裝置應位於釋放箱內，箱上應標明它們所控制的特定處所。如果裝有控制裝置的箱子是鎖閉的，則應將開箱的鑰匙放在位於箱子附近易見處的打碎玻璃便能取出鑰匙的封閉物中。”

禁止鹵化物系統的新裝置

16 由下列條款取代第 II-2/5 條第 3.1 款：

“3.1 鹵代烴作為滅火劑只允許在機器處所、泵艙和僅用於裝載未載有任何貨物的車輛的貨物處所中使用。在所有船上均應禁止鹵代烴系統的新裝置。”

第 II-2/13 條 – 固定式探火和火警系統

17. 由下列條文取代第 1.6 款：

“1.6 指示裝置至少應指示出探測器或手動呼叫點正在運作的部位。除船舶不在營運時外，在海上或港口時，至少有一個裝置應位於負責船員隨時易於接近的地方。如果控制板位於主消防控制位置，則有一個指示裝置應位於駕駛台。”

18 以下列條文取代第 1.8 款：

“1.8 如果探火系統不包含從遠距離分別對每一指示器作出識別的裝置，則除含有圍閉梯道的部位外，通常不應允許在居住、工作和控制位置內的任何部位有多於一層的甲板，為了避免遲延對火源的識別，每一部位中所含的圍蔽處所應限於主管機關規定的數目。在任何情況下，任何部位內的圍蔽處所不允許超過 50 個。如果探測系統裝有可以從遠距離分別進行識別的探火裝置，則此種部位可含有多層甲板並為任何數目的圍蔽處所服務。”

19 由下列條文取代第 1.9 款：

“1.9 在客船上，如果沒有能從遠距離分別對每一探測器作出識別的探測系統，則一個探測部位不應同時為在船舶兩舷的處所服務，不應包含多層甲板，也不應位於多個主垂直區內，除非主管機關確信這樣做不會降低船舶的防火保護而允許一個此

種探測部位同時為船舶兩舷和多層甲板服務。在裝有可分別進行識別的探測裝置的客船上，一個部位可同時為船舶兩舷服務並包括多層甲板，但不可位於多個主垂直區內。”

20 增加下列 1.15 款：

“1.15 在 1994 年 10 月 1 日或以後安裝的具有區域地址識別能力的深火系統應佈置成：

- 電路能被火損壞之處不超過一點；
- 配有裝置確保電路中發生的任何故障（如斷電、短路、接地）不會使整個電路無效；
- 作出一切佈置，使在出現故障（電氣、電子、信息故障）時能恢復該系統的初始位形；
- 首先觸發的火警不會阻礙任何其他探測裝置觸發新的火警。”

第 20 條

防火控制圖和消防演習

21 增加新的第 20.4 條，條文如下：

“載客超過 36 人的船上，本條要求的圖和手冊應根據本組織發表的指南，提供有關防火、探火和滅火的資料。”

第 II-2/24 條—主垂直區和水平區

22 將第 1.1 款改為：

“1.1 載客超過 36 人的船上，應以 A-60 級分隔將船體、上層建

築和甲板室分為多個主垂直區。梯階和凹入處應保持在最小數量，但如為必需者，它們也應是 A-60 級分隔。如有 26.2.2(5)、26.2.2(9) 或 26.2.2(10) 類的處所位於該分隔的一側，則可將標準降為 A-0。”

23 將第 2 款改為：

“2 凡可行時，構成艙壁甲板之上的主垂直區邊界的艙壁應與艙壁甲板緊下方的水密分艙艙壁處在一條線上。為使主垂直區的端部與水密分艙艙壁吻合，或為使主垂直區能容納延展於其整個長度的大型處所，主垂直區的長度和寬度最大可達 48 米，但主垂直區在任何甲板上的總面積不應大於 1,600 米²。主垂直區的長度或寬度係指構成其邊界的各艙壁最遠點之間的最大距離。”

24 刪去提及表 26.3 的文字。

第 II-2/25 條—主垂直區內的艙壁

25 在第 2 款首句句首加上下列文字：

“載客超過 36 人的船上，”

26 以下列條文取代第 3 款：

“3 除第 2 款中規定的走廊艙壁外，所有的要求為“B”級分隔的艙壁均應從甲板延至甲板或延至船殼或其他邊界；除非在艙壁兩側安裝的“B”級連續天花板或襯料至少與艙壁具有相同的耐火能力；在後種情況下，艙壁可在連續天花板或襯料處終止。”

第 II-2/26 條—載客超過 36 人的船舶的艙壁和甲板的耐火完整性

27 將第 2.1 款修正如下：

“2.1 表 26.1 應適用於不與主垂直區或水平區交界的艙壁。表 26.2 應適用於既不構成主垂直區內的梯級也不與水平區交界的甲板。”

28 在第 2.2 (3) 款中，刪去“和前室”等詞。

29 將第 2.2 (4) 款改為：

“(4) 撤離位置和外部逃離路線。

救生艇筏的存放區域。

構成救生艇和救生筏登乘和降放位置的露天甲板處所和圍蔽散步甲板。

內外集合位置。

用作逃離路線的外部樓梯和露天甲板。

空載航海水線之上的船舶側部、位於救生筏和撤離滑梯登乘區域之下並與其相鄰的上層建築和甲板室的側部。”

30 在第 2.2 (7) 款線結尾處加上“手術室”。

31 在第 2.2 (9) 款中刪去“手術室”。

32 在第 2.2(11)款中，刪去“驅動的”和“發電機”之間的“應急”一詞；在第一、二、和十一行中刪去“特種處所”。

33 刪去第 2.4 和 2.5 款，將原有的 2.6 款重新編號為 2.4 款。

34 刪去現有的 2.7 款，增加一個新的 2.5 款，條文如下：

“5 對於（5）類處所，主管機關應確定表 26.1 中的絕緣值是否應適用於甲板室和上層建築的端部；表 26.2 中的絕緣值是否應適用於風雨甲板。在任何情況下，表 26.1 或表 26.2 對（5）類的要求均不應使主管機關認為不需要圍蔽的處所必需為圍蔽處所。”

35 以下列表格取代表 26.1 和表 26.2：

表 26.2 — 不構成主垂直區中的梯級也不與水平區交界的甲板

下面的處所	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
控制站	(1)	A-30	A-30	A-15	A-0	A-0	A-15	A-30	A-0	A-0	A-0	A-60	A-0	A-60
梯道	(2)	A-0	A-0	-	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-30	A-0	A-30
走廊	(3)	A-15	A-0	A-0 ^a	A-60	A-0	A-15	A-15	A-0	A-0	A-0	A-30	A-0	A-30
撤離位置和外部逃離路線	(4)	A-0	A-0	A-0	-	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
露天甲板處所	(5)	A-0	A-0	A-0	A-0	-	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
失火危險小的居住處所	(6)	A-60	A-15	A-0	A-60	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
有中等失火危險的居住處所	(7)	A-60	A-15	A-15	A-60	A-0	A-15	A-15	A-0	A-0	A-0	A-0	A-0	A-0
有較大失火危險的居住處所	(8)	A-60	A-15	A-15	A-60	A-0	A-15	A-30	A-0	A-0	A-0	A-0	A-0	A-0
衛生和類似處所	(9)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
絕少或沒有失火危險的液艙、空位和輔機處所	(10)	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0 ^a	A-0	A-0	A-0	A-0
有中等失火危險的輔機處所、液貨艙和其他油艙及其他類似處所	(11)	A-60	A-60	A-60	A-60	A-0	A-15	A-30	A-0	A-0	A-0 ^a	A-0	A-0	A-30
機器處所和主廚房	(12)	A-60	A-60	A-60	A-60	A-0	A-60	A-60	A-0	A-0	A-30	A-30 ^a	A-0	A-60
儲藏室、工作間、配膳間等等	(13)	A-60	A-30	A-15	A-60	A-0	A-15	A-30	A-0	A-0	A-0	A-0	A-0	A-0
儲藏易燃液體的其他處所	(14)	A-60	A-60	A-60	A-60	A-0	A-30	A-60	A-0	A-0	A-0	A-0	A-0	A-0

註：用於表 26.1 和表 26.2 (見反面)

- a 如相鄰處所為同一數字的類別並且右上角上有 a 出現時，則在主管機關認為不必要時，不需在此種處所之間安裝艙壁或甲板。例如，在（12）類中，只要配膳間的艙壁和甲板能保持廚房界面的完整性，則在廚房與其配膳間之間不要求裝有艙壁。但在廚房與機器處所之間要求裝有艙壁，即使兩者均為（12）類亦然。
- b 空載航海水線以上的船舶側部、在救生筏和撤離滑梯之下並與其相鄰的上層建築和甲板室的側部可降為 A-30。
- c 若公共廁所整個安裝在梯道圍蔽內，則在梯道圍蔽內的公共廁所艙壁可以是“B”級完整性。”

36 刪去表 26.3 和表 26.4。

第 II-2/28 條—脫險通道

37 從 1.1 款最後一句中刪去“居住或”。

38 以下列者取代第 1.4 款：

“1.4 應禁止僅有一個逃離路線的走廊、門廊或部分走廊。”

39 以下列者取代第 1.5 款：

“.5 在 1.1 款要求的脫險通道中，至少有一個應由隨時可使用的圍蔽梯道構成，該梯道應從其起點高度至適當的救生艇和救生筏登乘甲板或如果登乘甲板未延至有關的主垂直區，至最高的風雨甲板提供連續防火遮蔽。在後種情況下，應配有通過外部露天梯道和走道進入登乘甲板的直接通道。此種直接通道應配有第 III/11.5 條要求的應急照明

和防滑表面。朝向作為逃離路線的組成部分的外部露天梯道和走道的邊界和在失火時不能使用便會妨礙逃到登乘甲板的邊界應有符合第 II-2/26 條中各表的耐火完整性，包括絕緣值。脫險通道的寬度、數目和連續性應符合下列要求：

- .5.1 梯道的淨寬不應小於 900 毫米。梯道的各邊均應裝有扶手。梯道的淨寬，在超過 90 人的人中，按每人 10 毫米加寬。如梯道寬度大於 900 毫米，則扶手間的最大淨寬度應為 1,800 毫米。此種梯道所撤離的總人數應定為船員人數的三分之二加上該梯道的服務區域內的乘客總人數。梯道的寬度應符合不低於本組織所通過者的標準。
- .5.2 按超過 90 人確定尺寸的所有梯道均應縱向定位。
- .5.3 脫險通道內的門道、走廊和居間的平台，應按梯道的方式確定尺寸。
- .5.4. 在沒有平台時，梯道的垂直高度不應超過 3.5 米，其坡度不應超過 45 度。
- .5.5 每層甲板高度上的樓梯平台面積應不小於 2 米²，在超過 20 人的人中，按每 10 人 1 米²增加，但不必超過 16 米²，但由有直接通道通到梯道圍蔽、為公共處所服務的那些樓梯平台除外。”

40 增加新的 1.9 款和 1.10 款，條文如下：

- “.9 在主管機關按 1.1 款的規定予以免除時，唯一的脫險通道應使人員能安全逃離，但是梯道的淨寬，在兩邊有扶手時不應小於 800 毫米。

- .10 除第 II-1/42 條和第 III/11.5 條要求的應急照明外，包括梯道和出口在內的脫險通道，應由燈光條或螢光條指示器作出標誌；指示器應在包括轉彎處和交叉口在內的逃離路線上的所有道岔處安裝，其在甲板之上的高度不應超過 0.3 米。標誌應使乘客能識別所有的逃離路線和立即識別逃離出口。如使用電力照明，則應由應急電源供電。它應佈置成：任一電燈的故障或燈光條的缺口不會使標誌失效，此外，所有的逃生路線標誌和消防設備位置標誌均應使用螢光材料或以燈光使之顯著。主管當局應確保此種燈光或螢光設備按本組織制定的指南作出了評定、測試和應用。”

- 41 增加一個新的第 3.3 款，條文如下：

“3.3 對位於機器處所內的機器控制室，應提供兩個脫險通道，其中至少有一個應提供通至機器處所外安全位置的連續防火遮蔽。”

第 II-2/29 條—居住和服務處所內的梯道和電梯的保護

- 42 以下列條文取代第 2 款：

“2 梯道的圍蔽應有通往走廊的直接通道，根據在緊急情況下可能使用它們的人數，此種圍蔽應有足夠面積以防擁擠。在此種梯道圍蔽的範圍內，只允許有公共廁所、以不燃材料製作的安全設備儲藏櫃和公共資料櫃。只有公共處所、走廊、公共廁所、特種處所、28.1.5 要求的脫險梯道和外部區域允許有通往這些梯道圍蔽的直接通道。”

第 II-2/30 條 – “A” 級分隔上的開口

43 以下列條文取代第 4 款：

- “4 主垂直區艙壁和梯道圍蔽上的防火門應滿足下列要求：
- .1 此種門應是自關閉式，應能在與關閉反向的傾角達 3.5 度時關上；在船舶處於正立狀況時，應有大約一致的關閉速度，此種速度應不長於 40 秒和不短於 10 秒。
 - .2 遙控滑動門或電動門應配有警報器；警報器應在門開始移動前至少 5 秒但不超過 10 秒發出警報並繼續發出警報直至門被完全關上。門應被設計成在其通道中接觸到物體時能重新打開，其重新打開的淨開口應至少為 0.75 米，但不超過 1 米。
 - .3 所有的門均應既能從連續有人值班的中央控制台同時或成組地遙控和自動釋放，也能從門兩側的某一位置逐一地進行此種釋放。在連續有人值班的中央控制台的防火控制板上必須指示出每一遙控門是否是關閉的。釋放裝置應設計成：在控制系統或中央供電中斷時，門會自動關閉、釋放開關應有開、關功能，以防止該系統的自動重新設定。不准使用不由中央控制台釋放的拉鉤。
 - .4 在電動門的鄰近處應配有就地蓄電池，以便能使用本地控制裝置將門至少操作（完全打開和關上）十次。
 - .5 雙扇門如帶有耐火完整性所必需的插銷，則該插銷在門被該系統釋放時應能被門的操作所觸發。

- .6 直接通到特種處所的門，如為電動或自動關閉者，則不需配有.2 和.3 中要求的警報器和遙控釋放裝置。”

44 在第 5 款開頭處加上下列文字：

“載客超過 36 人的船舶上，”

45 在第 6 款第一句結尾處加上下列文字：

“只要在第 33.3 條中不要求此種邊界具有“A”級完整性。”

46 加上新的第 7 款，條文如下：

“7 逃離路線內的梯道、公共處所和主垂直區艙壁上的所有“A”級門應配有自關閉的軟管孔，其材料、結構和耐火性應相當於它在其中安裝的門；當門關閉時，它應是一個 150 毫米的正方形開口。它應安裝在門的下緣內，與門的鉸鏈相對；對於滑動門，則在最靠近開口處。”

第 II-2/31 條—“B”級分隔上的開口

47 第 1 款改編為 1.1 款，將第一句修正如下：

““B”級分隔上的門和門框及其固定裝置，應提供其耐火性相等於分隔者的圍閉方法，但在此種門的下部可允許有通風開口。

* 參閱以第 A.517(13)號決議通過的“A”、“B”和“F”級分隔的耐火試驗程序建議書。”

48 增加下列新的 1.2 款：

“1.2 “B”級分隔上的艙室門應是自關閉式的。不允許裝位持器。”

49 在第 3 款開頭處加上下列文字：

“載客不超過 36 人的船上。”

第 II-2/32 條—通風系統

對 1.1 款作如下修改：刪去該句末尾處的“16 條 2 至 9”，改為“16 條 2 至 6、16 條 8 和 16 條 9。”

50 以下列條文取代 1.5 款：

“1.5 應對梯道圍蔽進行通風，應由獨立的風扇和導管系統為其服務，該系統不應為通風系統中的任何其他處所服務。”

插入下列新的 1.8 款和 1.9 款：

“1.8 在合理和可行時，通風導管應配有位置適當的入孔供檢查和清潔使用。

1.9 廚房爐灶的可能聚積油脂的排放管應符合第 II-2/16.3.2.1 和 16.3.2.2 條的要求並裝有下列裝置：

- .1 易於拿開供清洗的集油盤，除非裝有其他經認可的去油系統；
- .2 一個自動和遙控操作的擋火板，裝在導管下端，和另一個遙控操作的擋火板，裝在導管的上端；
- .3 在導管內的固定滅火裝置；
- .4 關閉排氣扇和供氣扇的遙控裝置，用於操作.2 中所述的擋火板和操作滅火系統。該裝置應在廚房入口附近。如裝有多支管系統，則應配有裝置，用以在將滅

火劑釋放到該系統中之前，關閉通過同一主導管進行排放的所有支管；和

.5 位置適當的人孔，供檢查和清潔使用。”

第 II-2/33 條—窗與舷窗

51 將第 2 款修正如下：

“2 雖有 26 條和 27 條表格中的要求，居住和服務處所及控制站的防風雨艙壁上的所有窗子和舷窗應使用鋼的或其他適當材料的框架結構。玻璃應由金屬鑲邊或鑲角加以固定。”

52 增加新的第 3 款如下：

“3 對着救生設備、登乘和集合區域、外部樓梯和用作逃離路線的露天甲板的窗子和在救生筏和逃離滑梯登乘區域之下的窗子，應具有第 II-2/26 條的表格所要求的耐火完整性。在窗子配有自動專用灑水噴頭時，A-0 級窗子可被接受為等效者。在船側位於救生艇登乘區域之下的窗子應具有至少等於“A-0”級的耐火完整性。”

第 II-2/34—易燃材料的有限使用

53 在第 1 款第一句的“地板”與“天花板”之間插入“風擋”一詞。

54 將第 6 款修正如下：

“6 梯道圍蔽中使用的家具應限於座位。它應是固定的，在每一甲板圍蔽中的每層甲板限於六個座位，其失火危險應是有限的，不應對乘客的逃離路線造成限制。如果座位是固定的，不燃的並且不會對乘客的逃離路線造成限制，則主管機關可允許

在梯道圍蔽範圍風的主接待區增設座位。在艙室區域中構成逃生路線的乘客和船員走廊中不准有家俱。除上述者外，可允許配有用以儲藏各條款要求的安全設備的、以不燃材料製作的儲藏櫃。

第 II-2/36 條—固定式探火和火警系統、自動灑水器、探火和火警系統

55 以下列條文取代第 36 條：

“固定式探火和火警系統和自動灑水、探火和火警系統

1 載客超過 36 人的船上，除空處所、衛生處所等沒有重大失火危險的處所外，應在每一獨立的垂直和水平區域的所有部分，在所有的居住和服務處所，以及，在主管機關認為必要時，在控制站中安裝某一下述裝置：

- .1 固定式探火和火警系統。它應具有應經認可的型式並符合第 13 條的要求。應被安裝和佈置成能探測出此種處所中出現的失火；或
- .2 自動灑水、探火和火警系統。它應具有經認可的型式並符合第 12 條的要求或本組織為經認可的等效灑水系統所制定的指商，應被安裝和佈置成能對此種處所作出保護。此外另應安裝一個固定式探火和火警系統。它應具有經認可的型式並符合第 13 條的要求。應被安裝和佈置成能在居住處所內的走廊、梯道和逃離路線中提供煙霧探測。

2 載客超過 36 人的船上，應在包括走廊和梯道的所有服務處所、控制站和居住處所中安裝自動灑水、探火和火警系統。它應具有經認可的型式並符合第 12 條的要求或本組織為經認可的等效灑水系統所制定的指南。或者，在水對必要設備可能造成損害的控制站內安裝另一種型式的經認可的固定式滅火系統。應安裝固定式探火和火警系統；它應具有經認可的型式並符合第 13 條的要求，應被安裝和佈置成能在包括走廊和梯道在內的服務處所、控制站和居住處所內提供煙霧探測。煙霧探測器不必裝在公共浴室和廚房裏，空處所、公共廁所和類似處所等幾乎沒有失火危險的處所中不必安裝自動灑水系統或固定式探火和火警系統。”

第 II-2/37 條—特種處所的保護

56 將為 1.2.1 款修正如下：

“1.2.1 載客超過 36 人的船上，應按 A-60 級標準對特種處所的邊界艙壁和甲板進行絕熱處理。但在分隔的一側如是 26.2.2 (5)、26.2.2 (9) 或 26.2.2 (10) 類的處，則該標準可降為 A-0。”

57 將現有的 1.2.2 款改為 1.2.3 款，插入新的 1.2.2 款如下：

“1.2.2 載客不超過 36 人的船上，應按對 27.1 表中 (11) 類處的要求對特種處所的邊界艙壁進行絕熱，應按對 27.2 表中 (11) 類處所的要求，對水平邊界進行絕熱。”

第 II-2/40 條—消防巡邏、探測、警報器和廣播系統

58 在第 5 款末尾處加上 “and open decks (和露天甲板)” 。

59 對第 5 款作出修正，在最後一句後增加如下文字：

“每一消防巡邏人員應配有雙向便攜式無線電話裝置”。

60 增加新的 7.1 至 7.2 款：

“7.1 載客超過 36 人的船舶應有供第 36.2 條要求的、集中於連續有人值班的中央控制站的各系統使用的警報器。此外用於遙控關閉防火門和關上通風扇的控制裝置應集中在同一位置。通風扇應能由船員在連續有人值班的控制站重新起動。中央控制站的控制板應能指示出防火門是處於打開還是關閉位置，指示出探測器、警報器和風扇是處於接通還是斷開的狀況。控制板應有連續供電並有接到備用電源上的自動轉換裝置供在失去正常供電時使用。除適用條款允許其他佈置者外，控制板應由主電源和第 II-1/42 條規定的應急電源供電。

7.2 控制板應按故障自動保護原理設計，例如，如第 II-2/13.1.3 條和第 II-1/51.1.4 條指出的那樣，斷開的探測線路應引起警報狀況。

第 59 條—透氣、清除、除氣和通風

60-1 在原第 3 款後插入下列新的第 4 款：

“4 充惰性氣體、通風和氣體測量

4.1 本款應適用於在 1994 年 10 月 1 日或以後建造的油輪。

4.2 雙層殼體處所和雙層底處所應裝有適當的供氣接頭。

4.3 對於要求裝有惰性氣體系統的油輪：

.1 雙層殼體處所應裝有適當的惰性氣體供應接頭；

- .2 如此種處所係與固定安裝的惰性氣體分配系統相連，則應配有裝置防止貨艙中的烴類氣體通過該系統進入到雙層殼體處所中；
- .3 如果此種處所與惰性氣體分配系統無固定連接，則應配有適當裝置使其能與惰性氣體總管連接。
- 4.4.1 應配有適當的便攜式儀器測量氧氣和易燃蒸氣的濃度。在選擇此種儀器時，應充分注意它們與 4.4.2 款所述的固定式氣體取樣管線系統的一起使用。
- 4.4.2 如使用氣體取樣軟管不能對雙層殼體內的氣體進行可靠的測量，則此種處所應裝有固定的氣體取樣管線。此種管線系統的構形應與此種處所的設計相適應。
- 4.4.3 取樣管線的結構材料和尺寸應能防止造成限制。如使用塑性材料，則應是導電的。”

第 III 章

第 50 條

總緊急警報系統

61 在最後一句的“船員工作處所”加上“和露天甲板”，將該條結尾處的句號改為逗號，再加上下列條文：

“其聲壓級應符合本組織制定的標準。在觸發後，警報應繼續報警，直至被手動關上或被廣播系統的廣播暫時打斷。”

第 IV 章的經認可的修正案

第 IV/13 條—電源

62 以下列條文取代 2.1 至 2.3 款的原有條文：

- “.1 對於配有完全符合第 II-1/42 或 43 條的所有有關規定（包括向無線電裝置供電的規定）的應急電源的船舶：1 小時；和
- .2 對未配有完全符合第 II-1/42 或 43 條所有有關規定（包括向無線電裝置供電的規定的應急電源的船舶：6 小時”。

63 刪去第 IV/13.4 條中提到的“2.3 款”。

第 IV/14 條—性能標準：

64 在第 IV/14.2 條中，將“by prescribed（由規定的……）”改為“prescribed by（由……規定的）”。

RESOLUTION MSC.27(61)
(adopted on 11 December 1992)

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, 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-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, 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 1 April 1994 unless, prior to the 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 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, the amendments shall enter into force on 1 October 1994 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 the resolution to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX

AMENDMENTS TO THE 1974 SOLAS CONVENTION

Access to spaces in the cargo area of oil tankers

- 1 Add the following after paragraph 11 of regulation II-1/2:

"12 An oil tanker is the oil tanker defined in regulation 1 of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973."

- 2 Add a new regulation II-1/12-2:

"Regulation 12-2Access to spaces in the cargo area of oil tankers

- 1 This regulation applies to oil tankers constructed on or after 1 October 1994.

2 Access to cofferdams, ballast tanks, cargo tanks and other spaces in the cargo area shall be direct from the open deck and such as to ensure their complete inspection. Access to double bottom spaces may be through a cargo pump-room, pump-room, deep cofferdam, pipe tunnel or similar compartments, subject to consideration of ventilation aspects.

3 For access through horizontal openings, hatches or manholes, the dimensions shall be sufficient to allow a person wearing a self-contained air-breathing apparatus and protective equipment to ascend or descend any ladder without obstruction and also to provide a clear opening to facilitate the hoisting of an injured person from the bottom of the space. The minimum clear opening should be not less than 600 mm by 600 mm.

4 For access through vertical openings, or manholes providing passage through the length and breadth of the space, the minimum clear opening should be not less than 600 mm by 800 mm at a height of not more than 600 mm from the bottom shell plating unless gratings or other footholds are provided.

5 For oil tankers of less than 5,000 tonnes deadweight smaller dimensions may be approved by the Administration in special circumstances, if the ability to traverse such openings or to remove an injured person can be proved to the satisfaction of the Administration."

Regulation II-1/37 - Communication between navigating bridge and machinery space

- 3 Number the present paragraph as paragraph 1 and add the following:

"2. For ships constructed on or after 1 October 1994 the following requirements apply in lieu of the provisions of paragraph 1:

At least two independent means shall be provided for communicating orders from the navigating bridge to the position in the machinery space or in

the control room from which the speed and direction of thrust of the propellers are normally controlled: one of these shall be an engine-room telegraph which provides visual indication of the orders and responses both in the machinery spaces and on the navigating bridge. Appropriate means of communication shall be provided from the navigating bridge and the engine-room to any other position from which the speed or direction of thrust of the propellers may be controlled."

Regulation II-1/42 - Emergency source of electric power in passenger ships

- 4 Insert the following paragraph after paragraph 3.2 of regulation II-1/42:

"3.3 The following provision in paragraph 3.1.2 shall not apply to ships constructed on or after 1 October 1994:

unless a second independent means of starting the emergency generating set is provided, the single source of stored energy shall be protected to preclude its complete depletion by the automatic starting system."

Regulation II-1/43 - Emergency source of electric power in cargo ships

- 5 Insert the following paragraph after paragraph 3.2 of regulation II-1/43:

"3.3 The following provision in paragraph 3.1.2 shall not apply to ships constructed on or after 1 October 1994:

unless a second independent means of starting the emergency generating set is provided, the single source of stored energy shall be protected to preclude its complete depletion by the automatic starting system."

Regulation II-1/44 - Starting arrangements for emergency generating sets

- 6 Insert the following paragraph after paragraph 2 of regulation II-1/44:

"2.1 Ships constructed on or after 1 October 1994, in lieu of the provision of the second sentence of paragraph 2, shall comply with the following requirements:

The source of stored energy shall be protected to preclude critical depletion by the automatic starting system, unless a second independent means of starting is provided. In addition, a second source of energy shall be provided for an additional three starts within 30 minutes unless manual starting can be demonstrated to be effective."

Regulation II-1/45 - Precautions against shock, fire and other hazards of electrical origin

- 7 Insert the following after paragraph 3.2 of regulation II-1/45:

"3.2-1 For ships constructed on or after 1 October 1994, the requirement of paragraph 3.1 does not preclude the use of limited and locally earthed systems, provided that any possible resulting current does not flow directly through any dangerous spaces."

8 Insert the following after paragraph 4.2:

"4.3 Ships constructed on or after 1 October 1994, in lieu of the provisions of paragraph 4.1, shall comply with the following requirements:

- .1 Except as permitted by paragraph 4.3.2, earthed distribution systems shall not be used in a tanker.
- .2 The requirement of paragraph 4.3.1 does not preclude the use of earthed intrinsically safe circuits and in addition, under conditions approved by the Administration, the use of the following earthed systems:
 - .2.1 power supplied, control circuits and instrumentation circuits where technical or safety reasons preclude the use of a system with no connection to earth, provided the current in the hull is limited to not more than 5 amps in both normal and fault conditions; or
 - .2.2 limited and locally earthed systems, provided that any possible resulting current does not flow directly through any of the dangerous spaces; or
 - .2.3 alternating current power networks of 1,000 V root mean square (line to line) and over, provided that any possible resulting current does not flow directly through any of the dangerous spaces."

Amendments to chapter II-2 dealing with fire-protection requirements of new ships

Regulation II-2/1 - Application

9 Amend paragraph 1.1 to read:

"1.1 Unless expressly provided otherwise, parts A, C and D of 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 1986, and part B of 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 October 1994."

10 Add the following to the present sentence of paragraph 2:

"and for ships constructed before 1 October 1994 the Administration shall ensure that the requirements which are applicable under part B of chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as amended by resolutions MSC.1(XLV), MSC.6(48), MSC.13(57), MSC.22(59) and MSC.24(60) are complied with."

Regulation II-2/3 - Definitions

11 Add a new paragraph 33 as follows:

"33 For ships constructed on or after 1 October 1994, in lieu of the definition of main vertical zones provided in paragraph 9, the following definition shall be applied:

Main vertical zones are those sections into which the hull, superstructure and deckhouses are divided by "A" class divisions, the mean length and width of which on any deck does not in general exceed 40 m."

Fire main and fire pump sizing

Regulation II-2/4.4.2

12 Add the following after paragraph 4.2:

"4.2.1 Passenger ships constructed on or after 1 October 1994, in lieu of the provisions of paragraph 4.2, shall comply with the following requirements:

With the two pumps simultaneously delivering through the nozzles specified in paragraph 8 and sufficient hydrants to provide for the quantity of water specified in paragraph 4.1, a minimum pressure of 0.4 N/mm² for ships of 4,000 tons gross tonnage and above and 0.3 N/mm² for ships of less than 4,000 tons gross tonnage shall be maintained at all hydrants."

Regulation II-2/4.3.3.3

13 Add the following after paragraph 3.3.3:

"3.3.3.1 For ships constructed on or after 1 October 1994, the alternative means to be provided in accordance with the provisions of paragraph 3.3.3 shall be an independently driven, power-operated emergency fire pump and with its source of power and sea connection located outside the machinery space."

Regulation II-2/4.3.3.2.9

14 Add the following after paragraph 3.3.2.8:

"3.3.2.9 Ships constructed on or after 1 October 1994, in lieu of the provisions of paragraph 3.3.2.6, shall comply with the following requirements;

The space containing the fire pump shall not be contiguous to the boundaries of machinery spaces of category A or those spaces containing main fire pumps. Where this is not practicable, the common bulkhead between the two spaces shall be insulated to a standard of structural fire protection equivalent to that required for a control station in regulation 44."

Release mechanism of CO₂

15 The following paragraphs are added after paragraph 2.4 of regulation II-2/5:

"2.5 Carbon dioxide systems installed on or after 1 October 1994 shall comply with the following requirements:

- .1 Two separate controls shall be provided for releasing carbon dioxide into a protected space and to ensure the activities of the alarm.

- One control shall be used to discharge the gas from its storage containers. A second control shall be used for opening the valve of the piping which conveys the gas into the protected space.
- .2 The two controls shall be located inside a release box clearly identified for the particular space. If the box containing the controls is to be locked, a key to the box shall be in a break-glass type enclosure conspicuously located adjacent to the box."

Prohibition of new installations of halon system

- 16 Replace paragraph 3.1 of regulation II-2/5 by the following:

"3.1 The use of halogenated hydrocarbons as fire-extinguishing media is only permitted in machinery spaces, pump-rooms and in cargo spaces intended solely for the carriage of vehicles which are not carrying any cargo. New installations of halogenated hydrocarbon systems shall be prohibited on all ships."

Regulation II-2/13 – Fixed fire detection and fire alarm systems

- 17 Replace paragraph 1.6 by the following:

"1.6 Indicating units shall, as a minimum, denote the section in which a detector or manually operated call point has operated. At least one unit shall be so located that it is easily accessible to responsible members of the crew at all times, when at sea or in port, except when the ship is out of service. One indicating unit shall be located on the navigating bridge if the control panel is located in the main fire control station."

- 18 Replace paragraph 1.8 by the following:

"1.8 Where the fire detection system does not include means of remotely identifying each detector individually, no section covering more than one deck within accommodation, service and control stations shall normally be permitted except a section which covers an enclosed stairway. In order to avoid delay in identifying the source of fire, the number of enclosed spaces included in each section shall be limited as determined by the Administration. In no case shall more than fifty enclosed spaces be permitted in any section. If the detection system is fitted with remotely and individually identifiable fire detectors, the sections may cover several decks and serve any number of enclosed spaces."

- 19 Replace paragraph 1.9 by the following:

"1.9 In passenger ships, if there is no fire detection system capable of remotely and individually identifying each detector, a section of detectors shall not serve spaces on both sides of the ship nor on more than one deck and neither shall it be situated in more than one main vertical zone except that the Administration, if it is satisfied that the protection of the ship against fire will not thereby be reduced, may permit such a section of detectors to serve both sides of the ship and more than one deck. In passenger ships fitted with individually identifiable fire detectors, a section may serve spaces on both sides of the ship and on several decks but may not be situated in more than one main vertical zone."

20 Add the following paragraph 1.15:

"1.15 Fire detection systems with a zone address identification capability fitted on or after 1 October 1994 shall be so arranged that:

- a loop cannot be damaged at more than one point by a fire;
- means are provided to ensure that any fault (e.g. power break; short circuit; earth) occurring in the loop will not render the whole loop ineffective;
- all arrangements are made to enable the initial configuration of the system to be restored in the event of failure (electrical, electronic, informatic);
- the first initiated fire alarm will not prevent any other detector from initiating further fire alarms."

Regulation 20

Fire control plans and fire drills

21 A new regulation 20.4 is added as follows:

"In ships carrying more than 36 passengers, plans and booklets required by this regulation shall provide the information regarding fire protection, fire detection and fire extinction based on the guidelines issued by the Organization".

Regulation II-2/24 - Main vertical zones and horizontal zones

22 Amend paragraph 1.1 to read:

"1.1 In ships carrying more than 36 passengers, the hull, superstructure and deckhouses shall be subdivided into main vertical zones by A-60 class divisions. Steps and recesses shall be kept to a minimum but where they are necessary they shall also be A-60 class divisions. Where a category 26.2.2(5), 26.2.2(9) or 26.2.2(10) space is on one side of the division the standard may be reduced to A-0."

23 Amend paragraph 2 to read:

"2 As far as practicable, the bulkheads forming the boundaries of the main vertical zones above the bulkhead deck shall be in line with watertight subdivision bulkheads situated immediately below the bulkhead deck. The length and width of main vertical zones may be extended to a maximum of 48 m in order to bring the ends of main vertical zones to coincide with subdivision watertight bulkheads or in order to accommodate a large public space extending for the whole length of the main vertical zone provided that the total area of the main vertical zone is not greater than 1,600 m² on any deck. The length or width of a main vertical zone is the maximum distance between the furthestmost points of the bulkheads bounding it."

24 Delete the reference to table 26.3.

Regulation II-2/25 – Bulkheads within a main vertical zone

25 Add the following at the beginning of the first sentence of paragraph 2:

"In ships carrying not more than 36 passengers,".

26 Replace paragraph 3 by the following:

"3 All bulkheads required to be "B" class divisions, except corridor bulkheads prescribed in paragraph 2, shall extend from deck to deck and to the shell or other boundaries unless the continuous "B" class ceilings or linings fitted on both sides of the bulkheads are at least of the same fire resistance as the bulkhead, in which case the bulkhead may terminate at the continuous ceiling or lining."

Regulation II-2/26 – Fire integrity of bulkheads and decks in ships carrying more than 36 passengers

27 Amend paragraph 2.1 as follows:

"2.1 Table 26.1 shall apply to bulkheads not bounding either main vertical zones or horizontal zones. Table 26.2 shall apply to decks not forming steps in main vertical zones nor bounding horizontal zones."

28 In paragraph 2.2(3), delete the words "and lobbies".

29 Amend paragraph 2.2(4) to read:

"(4) Evacuation stations and external escape routes.

Survival craft stowage area.

Open deck spaces and enclosed promenades forming lifeboat and liferaft embarkation and lowering stations.

Muster stations, internal and external.

External stairs and open decks used for escape routes.

The ship's side to the waterline in the lightest seagoing condition, superstructure and deckhouse sides situated below and adjacent to the liferaft and evacuation slide embarkation areas."

30 In paragraph 2.2(7), add "Operating rooms" at the end.

31 Delete "Operating rooms" from paragraph 2.2(9).

32 In paragraph 2.2(11), delete the word "emergency" between "driving" and "generators", and delete reference to "special category spaces" on the first, second and twentieth lines.

33 Delete paragraph 2.4 and 2.5, and renumber the present paragraph 2.6 as new paragraph 2.4.

34 Delete the present paragraph 2.7, and add a new paragraph 2.5 as follows:

"5 The Administration shall determine in respect of category (5) spaces whether the insulation values in table 26.1 shall apply to ends of deckhouses and superstructures, and whether the insulation values in table 26.2 shall apply to weather decks. In no case shall the requirements of category (5) of table 26.1 or 26.2 necessitate enclosure of spaces which in the opinion of the Administration need not be enclosed."

35 Replace tables 26.1 and 26.2 by the following:

TABLE 26.2 - DECKS NOT FORMING STEPS IN MAIN VERTICAL ZONES NOR BOUNDING HORIZONTAL ZONES

Spaces	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Control stations (1)	B-0*	A-0	A-0	A-0	A-0	A-60	A-60	A-60	A-0	A-0	A-60	A-60	A-60	A-60
Stairways (2)		A-0*	A-0	A-0	A-0	A-0	A-15	A-15	A-0*	A-0	A-15	A-30	A-15	A-30
Corridors (3)			B-15	A-60	A-0	B-15	B-15	B-15	B-15	A-0	A-15	A-30	A-0	A-30
Evacuation stations and external escape routes (4)					A-0	A-60 ^b	A-60 ^b	A-60 ^b	A-0	A-0	A-60 ^b	A-60 ^b	A-60 ^b	A-60 ^b
Open deck spaces (5)					—	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0	A-0
Accommodation spaces of minor fire risk (6)						B-0	B-0	B-0	C	A-0	A-0	A-30	A-0	A-30
Accommodation spaces of moderate fire risk (7)							B-0	B-0	C	A-0	A-15	A-60	A-15	A-60
Accommodation spaces of greater fire risk (8)								B-0	C	A-0	A-30	A-60	A-15	A-60
Sanitary and similar spaces (9)									C	A-0	A-0	A-0	A-0	A-0
Tanks, voids and auxiliary machinery spaces having little or no fire risk (10)										A-0*	A-0	A-0	A-0	A-0
Auxiliary machinery spaces, cargo spaces, cargo and other oil tanks and other similar spaces of moderate fire risk (11)											A-0*	A-0	A-0	A-15
Machinery spaces and main galleys (12)												A-0*	A-0	A-60
Store-rooms, workshops, pantries etc. (13)													A-0*	A-0
Other spaces in which flammable liquids are stowed (14)														A-30

Notes: To be applied to tables 26.1 to 26.2.

- a Where adjacent spaces are in the same numerical category and superscript ^a appears, a bulkhead or deck between such spaces need not be fitted if deemed unnecessary by the Administration. For example, in category (12) a bulkhead need not be required between a galley and its annexed pantries provided the pantry bulkhead and decks maintain the integrity of the galley boundaries. A bulkhead is, however, required between a galley and a machinery space even though both spaces are in category (12).
- b The ship's side, to the waterline in the lightest seagoing condition, superstructure and deckhouse sides situated below and adjacent to the liferafts and evacuation slides may be reduced to A-30.
- c Where public toilets are installed completely within the stairway enclosure, the public toilet bulkhead within the stairway enclosure can be of "B" class integrity."

36 Delete tables 26.3 and 26.4.

Regulation II-2/28 - Means of escape

37 Delete "accommodated or" from the last sentence of paragraph 1.1.

38 Replace paragraph 1.4 by the following:

"1.4 A corridor, lobby, or part of a corridor from which there is only one route of escape shall be prohibited."

39 Replace paragraph 1.5 by the following:

"1.5 At least one of the means of escape required by paragraphs 1.1 and 1.2 shall consist of a readily accessible enclosed stairway, which shall provide continuous fire shelter from the level of its origin to the appropriate lifeboat and liferaft embarkation decks, or to the uppermost weather deck if the embarkation deck does not extend to the main vertical zone being considered. In the latter case, direct access to the embarkation deck by way of external open stairways and passageways shall be provided and shall have emergency lighting in accordance with regulation III/11.5 and slip-free surfaces under foot. Boundaries facing external open stairways and passageways forming part of an escape route and boundaries in such a position that their failure during a fire would impede escape to the embarkation deck shall have fire integrity, including insulation values, in accordance with the tables in regulation II-2/26. The widths, number and continuity of escapes shall be as follows:

- .5.1 Stairways shall not be less than 900 mm in clear width. Stairways shall be fitted with handrails on each side. The minimum clear width of stairways shall be increased by 10 mm for every one person provided for in excess of 90 persons. The maximum clear width between handrails where stairways are wider than 900 mm shall be 1,800 mm. The total number of persons to be evacuated by such stairways shall be assumed to be two thirds of the crew and the total number of passengers in the areas served by such stairways. The width of the stairways

shall conform to standards not inferior to those adopted by the Organization.

- .5.2 All stairways sized for more than 90 persons shall be aligned fore and aft.
- .5.3 Doorways and corridors and intermediate landings included in means of escape shall be sized in the same manner as stairways.
- .5.4 Stairways shall not exceed 3.5 m in vertical rise without the provision of a landing and shall not have an angle of inclination greater than 45°.
- .5.5 Landings at each deck level shall be not less than 2 m² in area and shall increase by 1 m² for every 10 persons provided for in excess of 20 persons but need not exceed 16 m², except for those landings servicing public spaces having direct access onto the stairway enclosure.

40 Add new paragraphs 1.9 and 1.10 as follows:

"9 Where the Administration has granted dispensation under the provisions of paragraph 1.1, the sole means of escape shall provide safe escape. However, stairways shall not be less than 800 mm in clear width with handrails on both sides.

.10 In addition to the emergency lighting required by regulations II-1/42 and III/11.5, the means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed not more than 0.3 m above the deck at all points of the escape route including angles and intersections. The marking must enable passengers to identify all the routes of escape and readily identify the escape exits. If electric illumination is used, it shall be supplied by the emergency source of power and it shall be so arranged that the failure of any single light or cut in a lighting strip, will not result in the marking being ineffective. Additionally, all escape route signs and fire equipment location markings shall be of photoluminescent material or marked by lighting. The Administration shall ensure that such lighting or photoluminescent equipment have been evaluated, tested and applied in accordance with the guidelines developed by the Organization."

41 Add a new paragraph 3.3 as follows:

"3.3 Two means of escape shall be provided from a machinery control room located within a machinery space, at least one of which will provide continuous fire shelter to a safe position outside the machinery space."

Regulation II-2/29 - Protection of stairways and lifts in accommodation and service spaces

42 Replace paragraph 2 by the following:

"2 Stairway enclosures shall have direct access to the corridors and be of a sufficient area to prevent congestion, having in view the number of persons likely to use them in an emergency. Within the perimeter of

such stairway enclosures, only public toilets, lockers of non-combustible material providing storage for safety equipment and open information counters are permitted. Only public spaces, corridors, public toilets, special category spaces, other escape stairways required by 28.1.5 and external areas are permitted to have direct access to these stairway enclosures."

Regulation II-2/30 - Openings in "A" class division

43 Replace paragraph 4 by the following:

"4 Fire doors in main vertical zone bulkheads and stairway enclosures shall satisfy the following requirements:

- .1 The doors shall be self-closing and be capable of closing with an angle of inclination of up to 3.5° opposing closure, and shall have an approximately uniform rate of closure of no more than 40 s and no less than 10 s with the ship in the upright position.
- .2 Remote-controlled sliding or power-operated doors shall be equipped with an alarm that sounds at least 5 s but no more than 10 s before the door begins to move and continue sounding until the door is completely closed. Doors designed to reopen upon contacting an object in its path shall reopen sufficiently to allow a clear passage of at least 0.75 m, but no more than 1 m.
- .3 All doors shall be capable of remote and automatic release from a continuously manned central control station, either simultaneously or in groups, and also individually from a position at both sides of the door. Indication must be provided at the fire control panel in the continuously manned central control station whether each of the remote-controlled doors are closed. The release mechanism shall be so designed that the door will automatically close in the event of disruption of the control system or central power supply. Release switches shall have an on-off function to prevent automatic resetting of the system. Hold-back hooks not subject to central control station release are prohibited.
- .4 Local power accumulators for power-operated doors shall be provided in the immediate vicinity of the doors to enable the doors to be operated at least ten times (fully opened and closed) using the local controls.
- .5 Double-leaf doors equipped with a latch necessary to their fire integrity shall have a latch that is automatically activated by the operation of the doors when released by the system.
- .6 Doors giving direct access to special category spaces which are power-operated and automatically closed need not be equipped with alarms and remote-release mechanisms required in .2 and .3."

- 44 In paragraph 5, add the following words at the beginning:
"In ships carrying not more than 36 passengers,".
- 45 In paragraph 6, add the following words at the end of the first sentence:
"provided that there is no requirement for such boundaries to have "A" class integrity in regulation 33.3".
- 46 Insert a new paragraph 7 as follows:
"7 All "A" class doors located in stairways, public spaces and main vertical zone bulkheads in escape routes shall be equipped with a self-closing hose port of material, construction and fire resistance which is equivalent to the door into which it is fitted, and shall be a 150 mm square clear opening with the door closed and shall be inset into the lower edge of the door, opposite the door hinges, or in the case of sliding doors, nearest the opening."

Regulation II-2/31 - Openings in "B" class division

- 47 Renumber paragraph 1 as paragraph 1.1 and amend the first sentence to read:
"Doors and door frames in "B" class divisions and means of securing them shall provide a method of closure which shall have resistance to fire equivalent to that of the divisions* except that ventilation openings may be permitted in the lower portion of such doors."
"* Reference is made to the Recommendation on Fire Test Procedures for "A", "B" and "F" class divisions, adopted by resolution A.517(13)."

- 48 Add a new paragraph 1.2 to read:
"1.2 Cabin doors in "B" class divisions shall be of a self-closing type. Hold-backs are not permitted."
- 49 In paragraph 3, add the following at the beginning:
"In ships carrying not more than 36 passengers".

Regulation II-2/32 - Ventilation systems

- Paragraph 1.1 is revised by deleting "16.2 to 16.9" at the end of the sentence and replacing it with "16.2 to 16.6, 16.8 and 16.9".
- 50 Replace paragraph 1.5 by the following:
"1.5 Stairway enclosures shall be ventilated and shall be served only by an independent fan and duct system which shall not serve any other spaces in the ventilation system."

The following new paragraphs 1.8 and 1.9 are inserted:

- "1.8 Ventilation ducts shall be provided with suitably located hatches for inspection and cleaning, where reasonable and practicable.
- 1.9 Exhaust ducts from galley ranges in which grease or fat is likely to accumulate shall meet requirements of regulation II-2/16.3.2.1 and 16.3.2.2 and shall be fitted with:
- .1 a grease trap readily removable for cleaning unless an alternative approved grease removal system is fitted;
 - .2 a fire damper located in the lower end of the duct which is automatically and remotely operated, and in addition a remotely operated fire damper located in the upper end of the duct;
 - .3 a fixed means for extinguishing a fire within the duct;
 - .4 remote control arrangements for shutting off the exhaust fans and supply fans, for operating the fire dampers mentioned in .2 and for operating the fire-extinguishing system, which shall be placed in a position close to the entrance to the galley. Where a multi-branch system is installed, means shall be provided to close all branches exhausting through the same main duct before an extinguishing medium is released into the system; and
 - .5 suitably located hatches for inspection and cleaning."

Regulation II-2/33 - Windows and sidescuttles

51 Amend paragraph 2 to read:

"2 Notwithstanding the requirements of the tables in regulations 26 and 27, all windows and sidescuttles in bulkheads separating accommodation and service spaces and control stations from weather shall be constructed with frames of steel or other suitable material. The glass shall be retained by a metal glazing bead or angle."

52 Add new paragraph 3 as follows:

"3 Windows facing life-saving appliances, embarkation and muster areas, external stairs and open decks used for escape routes, and windows situated below liferaft and escape slide embarkation areas shall have the fire integrity as required in the tables in regulation II-2/26. Where automatic dedicated sprinkler heads are provided for windows, A-0 windows may be accepted as equivalent. Windows located in the ship's side below the lifeboat embarkation areas shall have the fire integrity at least equal to "A-0" class."

Regulation II-2/34 - Restricted use of combustibile material

53 Insert the words "draught stops" between "grounds" and "ceilings" in the first sentence of paragraph 1.

54 Amend paragraph 6 to read:

"6 Furniture in stairway enclosures shall be limited to seating. It shall be fixed, limited to six seats on each deck in each stairway enclosure, be of restricted fire risk, and shall not restrict the passenger escape route. The Administration may permit additional seating in the main reception area within a stairway enclosure if it is fixed, non-combustible and does not restrict the passenger escape route. Furniture shall not be permitted in passenger and crew corridors forming escape routes in cabin areas". In addition to the above, lockers of non-combustible material, providing storage for safety equipment required by regulations, may be permitted.

Regulation II-2/36 - Fixed fire detection and fire alarm systems, automatic sprinkler, fire detection and fire alarm systems

55 Replace regulation 36 by the following:

"Fixed fire detection and fire alarm systems and automatic sprinkler, fire detection and fire alarm systems

1 In passenger ships carrying not more than 36 passengers there shall be installed throughout each separate zone, whether vertical or horizontal, in all accommodation and service spaces and, where it is considered necessary by the Administration, in control stations, except spaces which afford no substantial fire risk such as void spaces, sanitary spaces, etc., either:

- .1 a fixed fire detection and fire alarm system of an approved type and complying with the requirements of regulation 13 and so installed and arranged as to detect the presence of fire in such spaces; or
- .2 an automatic sprinkler, fire detection and fire alarm system of an approved type and complying with the requirements of regulation 12 or the guidelines developed by the Organization for an approved equivalent sprinkler system and so installed and arranged as to protect such spaces and, in addition, a fixed fire detection and fire alarm system of an approved type complying with the requirements of regulation 13 so installed and arranged as to provide smoke detection in corridors, stairways and escape routes within accommodation spaces.

2 Passenger ships carrying more than 36 passengers shall be equipped with an automatic sprinkler, fire detection and fire alarm system of an approved type complying with the requirements of regulation 12, or the guidelines developed by the Organization for an approved equivalent sprinkler system in all service spaces, control stations and accommodation spaces, including corridors and stairways. Alternatively, control stations where water may cause damage to essential equipment may be fitted with an approved fixed fire-extinguishing system of another type. A fixed fire detection and fire alarm system of an approved type shall be installed, complying with the requirements of regulation 13 so

installed and arranged as to provide smoke detection in service spaces, control stations and accommodation spaces, including corridors and stairways. Smoke detectors need not be fitted in private bathrooms and galleys. Spaces having little or no fire risk such as voids, public toilets and similar spaces need not be fitted with an automatic sprinkler system, or fixed fire detection and alarm system."

Regulation II-2/37 – Protection of special category spaces

56 Amend paragraph 1.2.1 as follows:

"1.2.1 In passenger ships carrying more than 36 passengers the boundary bulkheads and decks of special category spaces shall be insulated to A-60 class standard. However, where a category 26.2.2(5), 26.2.2(9) or 26.2.2(10) space is on one side of the division the standard may be reduced to A-0.

57 Renumber existing paragraph 1.2.2 as 1.2.3 and insert a new paragraph 1.2.2 to read:

"1.2.2 In passenger ships carrying not more than 36 passengers the boundary bulkheads of special category spaces shall be insulated as required for category (11) spaces in table 27.1 and the horizontal boundaries as required for category (11) spaces in table 27.2."

Regulation II-2/40 – Fire patrols, detection, alarms and public address systems

58 Add the words "and open decks" at the end of paragraph 5.

59 Paragraph 5 is amended to add after the last sentence:

"Each member of the fire patrol shall be provided with a two-way portable radio telephone apparatus".

60 Add new paragraphs 7.1 to 7.2:

"7.1 Passenger ships carrying more than 36 passengers shall have the detection alarms for the systems required by regulation 36.2 centralized in a continuously manned central control station. In addition, controls for remote closing of the fire doors and shutting down the ventilation fans, shall be centralized in the same location. The ventilation fans shall be capable of reactivation by the crew at the continuously manned control station. The control panels in the central control station shall be capable of indicating open or closed positions of fire doors, closed or off status of the detectors, alarms and fans. The control panel shall be continuously powered and should have an automatic change-over to stand-by power supply in case of loss of normal power supply. The control panel shall be powered from the main source of electrical power and the emergency source of electrical power defined by regulation II-1/42 unless other arrangements are permitted by the regulations, as applicable.

7.2 The control panel shall be designed on the fail-safe principle, e.g. an open detector circuit shall cause an alarm condition, as noted in regulations II-2/13.1.3 and II-1/51.1.4."

Regulation 59 - Venting, purging, gas-freeing and ventilation

60-1 The following new paragraph 4 should be inserted after the existing paragraph 3:

"4 Inerting, Ventilation and gas measurement

- 4.1 This paragraph shall apply to oil tankers constructed on or after 1 October 1994.
- 4.2 Double hull and double bottom spaces shall be fitted with suitable connections for the supply of air.
- 4.3 On tankers required to be fitted with inert gas systems:
- .1 double hull spaces shall be fitted with suitable connections for the supply of inert gas;
 - .2 where hull spaces are connected to a permanently fitted inert gas distribution system, means shall be provided to prevent hydrocarbon gases from the cargo tanks entering the double hull spaces through the system;
 - .3 where such spaces are not permanently connected to an inert gas distribution system, appropriate means shall be provided to allow connection to the inert gas main.
- 4.4.1 Suitable portable instruments for measuring oxygen and flammable vapour concentrations shall be provided. In selecting these instruments, due attention shall be given for their use in combination with the fixed gas sampling line systems referred to in paragraph 4.4.2.
- 4.4.2 Where atmosphere in double hull spaces cannot be reliably measured using flexible gas sampling hoses, such spaces shall be fitted with permanent gas sampling lines. The configuration of such line systems shall be adapted to the design of such spaces.
- 4.4.3 The materials of construction and the dimensions of gas sampling lines shall be such as to prevent restriction. Where plastic materials are used, they should be electrically conductive."

Chapter III

Regulation 50

General emergency alarm system

61 Delete the full stop at the end of the regulation and add the following:

"and open decks, and its sound pressure level shall comply with the standard developed by the Organization. The alarm shall continue to function after it has been triggered until it is manually turned off or is temporarily interrupted by a message on the public address system".

Approved amendments to chapter IVRegulation IV/13 – Sources of energy

62 Replace the existing text of paragraphs 2.1 to 2.3 by:

.1 one hour on ships provided with an emergency source of electrical power, if such source of power complies fully with all relevant provisions of regulation II-1/42 or 43, including the supply of such power to the radio installations; and

.2 six hours on ships not provided with an emergency source of electrical power complying fully with all relevant provisions of regulation II-1/42 or 43, including the supply of such power to the radio installations."

63 Delete the reference in regulation IV/13.4 to paragraph 2.3.

Regulation IV/14 – Performance standards

64 Replace "by prescribed" in regulation IV/14.2 by "prescribed by".

第 75/2014 號行政長官公告**Aviso do Chefe do Executivo n.º 75/2014**

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》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.50(66)號決議通過了《國際散裝運輸危險化學品船舶構造和設備規則》修正案，且有關修正案自一九九九年十二月二十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MSC.50(66)號決議的中文及英文文本。

二零一四年十月二十日發佈。

行政長官 崔世安

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;

Considerando igualmente que, em 4 de Junho de 1996, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.50(66), adoptou emendas ao Código Internacional para a Construção e Equipamento de Navios que Transportam Substâncias Químicas Perigosas a Granel, e que tais emendas entraram em vigor, em relação à Região Administrativa Especial de Macau, em 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.50(66), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 20 de Outubro de 2014.

O Chefe do Executivo, *Chui Sai On*.