



CỤC ĐĂNG KIỂM VIỆT NAM
VIETNAM REGISTER

ĐỊA CHỈ: 18 PHẠM HÙNG, HÀ NỘI
ADDRESS: 18 PHAM HUNG ROAD, HA NOI
DIỆN THOẠI/ TEL: +84 4 3 7684701
FAX: +84 4 3 7684779
EMAIL: vr-id@vr.org.vn
WEB SITE: www.vr.org.vn

THÔNG BÁO KỸ THUẬT TÀU BIỂN
TECHNICAL INFORMATION ON SEA-GOING SHIPS

Ngày 10 tháng 4 năm 2013

Số thông báo: 006TI/13TB

Nội dung: Trang bị Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng cho tàu hàng hoạt động tuyến quốc tế theo quy định của Công ước SOLAS.

Kính gửi: Các chủ tàu/ công ty quản lý tàu biển
Các công ty thiết kế tàu
Các nhà máy đóng tàu
Các đơn vị đăng kiểm tàu biển

Trong thời gian gần đây Cục Đăng kiểm Việt Nam đã nhận được một số yêu cầu về giải thích việc trang bị các tài liệu liên quan đến kiểm soát hư hỏng cho tàu hàng hoạt động tuyến quốc tế. Một số công ty quản lý tàu bày tỏ sự quan ngại về việc một số nhân viên kiểm tra của Chính quyền cảng nước ngoài (PSCO) đưa ra yêu cầu không đúng về việc trang bị loại tài liệu này cho tàu.

Công ước quốc tế về an toàn sinh mạng con người trên biển năm 1974 (SOLAS) đưa ra quy định về trang bị **Sơ đồ kiểm soát hư hỏng** (Damage Control Plan) và **Sổ tay kiểm soát hư hỏng** (Damage Control Booklet) cho tàu hàng có tổng dung tích từ 500 trở lên hoạt động tuyến quốc tế như sau:

1. Tàu hàng khô được đóng trước ngày 01 tháng 02 năm 1992 và các tàu hàng khác được đóng trước ngày 01 tháng 01 năm 2009: không phải trang bị.
2. Tàu hàng khô được đóng từ ngày 01 tháng 02 năm 1992 đến ngày 31 tháng 12 năm 2008: phải trang bị theo Quy định II-1/23-1 của Sửa đổi, bổ sung năm 1989 của Công ước SOLAS.
3. Tất cả các loại tàu hàng được đóng từ ngày 01 tháng 01 năm 2009: phải trang bị theo Quy định II-1/19 của Sửa đổi, bổ sung năm 2005 của Công ước SOLAS.

Các tàu hàng có tổng dung tích dưới 500 không phải trang bị Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng.

Một số vấn đề dưới đây cần lưu ý khi trang bị **Sơ đồ kiểm soát hư hỏng** và **Sổ tay kiểm soát hư hỏng** cho tàu hàng:

- Sơ đồ kiểm soát hư hỏng phải được niêm yết cố định hoặc luôn có sẵn trên buồng lái;
- Sổ tay kiểm soát hư hỏng bao gồm các thông tin thích hợp phải luôn có sẵn cho các sỹ quan tàu;
- Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng phải được viết bằng ngôn ngữ làm việc trên tàu và một ngôn ngữ chính thức của Công ước SOLAS, nếu ngôn ngữ làm việc trên tàu khác với ngôn ngữ chính thức của Công ước này;
- Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng phải phù hợp với tàu cụ thể và phải được Đăng kiểm phê chuẩn;
- Thuyền trưởng và các sỹ quan của tàu phải hiểu và giải thích được nội dung của Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng;
- Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng trang bị cho tàu đóng trước ngày 01 tháng 01 năm 2009 được soạn thảo theo hướng dẫn của Thông tư MSC/Circ.919 ngày 15 tháng 6 năm 1999 - “*Hướng dẫn về sơ đồ kiểm soát hư hỏng*”;
- Sơ đồ kiểm soát hư hỏng và Sổ tay kiểm soát hư hỏng trang bị cho tàu đóng từ ngày 01 tháng 01 năm 2009 được soạn thảo theo hướng dẫn của Thông tư MSC.1/Circ.1245 ngày 29 tháng 10 năm 2007 - “*Hướng dẫn về sơ đồ và thông tin kiểm soát hư hỏng dành cho thuyền trưởng*”.

Chúng tôi xin gửi kèm theo Thông báo kỹ thuật này Thông tư MSC/Circ.919 và Thông tư MSC.1/Circ.1245; đề nghị các Quý Đơn vị lưu ý áp dụng theo đúng quy định.

Thông báo kỹ thuật này được nêu trong mục: *Thông báo của VR/ Thông báo kỹ thuật TB* của trang tin điện tử Cục Đăng kiểm Việt Nam: <http://www.vr.org.vn>.

Nếu Quý Đơn vị cần thêm thông tin về vấn đề nêu trên, đề nghị vui lòng liên hệ:

Cục Đăng kiểm Việt Nam, Phòng Tàu biển

Địa chỉ: 18 Phạm Hùng, Từ Liêm, Hà Nội

Điện thoại: + 4 37684701 (số máy lẻ: 521)

Fax: +4 37684722

Thư điện tử: bangph@vr.org.vn

Xin gửi đến các Quý Đơn vị lời chào trân trọng./.

**KT. CỤC TRƯỞNG
PHÓ CỤC TRƯỞNG**

Nơi nhận:

- Như trên;
- Phòng QP, TB, CN, CTB;
- Trung tâm VRQC, TH;
- Lưu TB./.

Nguyễn Vũ Hải



GUIDELINES FOR DAMAGE CONTROL PLANS

1 The Maritime Safety Committee, at its seventy-first session (19 to 28 May 1999), noted that damage control plans and damage control booklet are intended to provide ship's officers with clear information on the ship's watertight compartmentation and equipment related to maintaining the boundaries and effectiveness of the compartmentation so that, in the event of damage to the ship, proper precautions can be taken to prevent progressive flooding through opening therein and effective action can be taken to quickly mitigate and, where possible, recover the ship's loss of stability.

2 With a view to providing Administrations with advice on the preparation of damage control plans for passenger and cargo ships in order that shipmasters can be assisted in their decisions when addressing situations caused by damage to ships, the Committee approved the Guidelines for damage control plans set out in the annex.

3 Member Governments are invited to use the annexed Guidelines when applying provisions of SOLAS regulations II-1/23, II-1/23-1 and II-1/25-8 and to bring the aforementioned Guidelines to the attention of all parties concerned, in particular shipbuilders, shipmasters, shipowners, ship operators and shipping companies.

ANNEX**GUIDELINES FOR DAMAGE CONTROL PLANS****1 Application**

These guidelines are intended as advice on the preparation of damage control plans for passenger and cargo ships to which SOLAS regulations II-1/23, II-1/23-1 and II-1/25-8 apply.

2 General

2.1 The damage control plan and damage control booklet are intended to provide ship's officers with clear information on the ship's watertight compartmentation and equipment related to maintaining the boundaries and effectiveness of the compartmentation so that, in the event of damage to the ship causing flooding, proper precautions can be taken to prevent progressive flooding through openings therein and effective action can be taken quickly to mitigate and, where possible, recover the ship's loss of stability.

2.2 The damage control plan and damage control booklet should be clear and easy to understand. It should not include information which is not directly relevant to damage control, and should be provided in the working language of the ship. If the languages used in the preparation of the plan and booklet are not one of the official languages of the SOLAS Convention, a translation into one of the official languages should be included.

3 Damage control plans

3.1 The damage control plan should be of a scale adequate to show clearly the required content of the plan, but not less than a 1:200 scale.

3.2 Isometric drawings are recommended for special purposes. The plan should include inboard profile, plan views of each deck and transverse sections to the extent necessary to show the following:

- .1 the watertight boundaries of the ship;
- .2 the locations and arrangements of cross-flooding systems, blow-out plugs and any mechanical means to correct list due to flooding, together with the locations of all valves and remote controls, if any;
- .3 the locations of all internal watertight closing appliances including on ro-ro ships, internal ramps or doors acting as extension of the collision bulkhead and their controls and the locations of their local and remote controls, position indicators and alarms. The locations of those watertight closing appliances which are not allowed to be opened during the navigation and of those watertight closing appliances which are allowed to be opened during navigation, according to SOLAS regulation II-1/15, should be clearly indicated;
- .4 the locations of all doors in the shell of the ship, position indicators, leakage detection and surveillance devices;
- .5 the locations of all weathertight closing appliances in local subdivision boundaries above the bulkhead deck and on the lowest exposed weather decks, together with locations of controls and position indicators, if applicable;

- .6 the locations of all bilge and ballast pumps, their control positions and associated valves; and
- .7 pipes, ducts or tunnels, if any, through which limited progressive flooding has been accepted by the Administration.

4 Damage control booklets

4.1 The information listed in section 3 should be repeated in the damage control booklet.

4.2 The damage control booklet should include general instructions for controlling the effects of damage, such as:

- .1 immediately closing all watertight and weathertight closing appliances;
- .2 establishing the locations and safety of persons on board, sounding tanks and compartments to ascertain the extent of damage and repeated soundings to determine rates of flooding; and
- .3 cautionary advice regarding the cause of any list and of liquid transfer operations to lessen list or trim, and the resulting effects of creating additional free surfaces and of initiating pumping operations to control the ingress of water.

4.3 The booklet should contain additional details to the information shown on the damage control plan, such as the locations of all sounding devices, tank vents and overflows which do not extend above the weather deck, pump capacities, piping diagrams, instructions for operating cross-flooding systems, means of accessing and escaping from watertight compartments below the bulkhead deck for use by damage control parties, and alerting ship management and other organizations to stand by and to co-ordinate assistance, if required.

4.4 If applicable to the ship, locations of non-watertight openings with non-automatic closing devices through which progressive flooding might occur should be indicated as well as guidance on the possibility of non-structural bulkheads and doors or other obstructions retarding the flow of entering seawater to cause at least temporary conditions of unsymmetrical flooding.

4.5 If the results of the subdivision and damage stability analyses are included, additional guidance should be provided to ensure that the ship's officers referring to that information are aware that the results are included only to assist them in estimating the ship's relative survivability.

4.6 The guidance should identify criteria on which the analyses were based and clearly indicate that the initial conditions of the ship's loading extents and locations of damage, permeabilities, assumed for the analyses may have no correlation with the actual damaged condition of the ship.

5 Use of on-board computers

Damage control plans and damage control booklets should be in printed form. The use of on-board computers*, with damage stability software developed for the specific ship, and familiar to properly trained ship's officers can provide a rapid means to supplement the information in the planned booklet for effective damage control.

6 Visual guidance to the master

Simple, clear and concise guidance, such as damage consequence diagrams, can provide the master with a rapid means to evaluate the consequence of damage to the ship.

7 Placement on board the ship

7.1 For passenger ships, the damage control plan should be permanently exhibited on the navigation bridge, as well as in the ship's control station, or equivalent.

7.2 For cargo ships, the damage control plan should be permanently exhibited or readily available on the navigation bridge. Furthermore, the damage control plan should be permanently exhibited or readily available in the cargo control room.

* Refer to the Guidelines for the on-board use and application of computers (MSC/Circ.891).



IMO

E

Ref. T1/2.04

MSC.1/Circ.1245
29 October 2007

GUIDELINES FOR DAMAGE CONTROL PLANS AND INFORMATION TO THE MASTER

1 The Maritime Safety Committee, at its eighty-third session (3 to 12 October 2007), following a proposal by the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety at its fiftieth session, approved Guidelines for damage control plans and information to the master, set out in the annex, with the objective to provide advice on the preparation of damage control plans and to set a minimum level for the presentation of damage stability information for use on board passenger and cargo ships to which SOLAS regulation II-1/19, as amended by resolution MSC.216(82), applies.

2 Member Governments are invited to use the annexed Guidelines when applying the requirements of SOLAS regulation II-1/19, as amended by resolution MSC.216(82), and to bring the aforementioned Guidelines to the attention of all parties concerned, in particular shipbuilders, shipmasters, shipowners, ship operators and shipping companies.

ANNEX

GUIDELINES FOR DAMAGE CONTROL PLANS AND INFORMATION TO THE MASTER

1 Application

These Guidelines are intended as advice on the preparation of damage control plans and to set a minimum level for the presentation of damage stability information for use on board passenger and cargo ships to which SOLAS regulation II-1/19, as amended by resolution MSC.216(82), applies.

2 General

2.1 The damage control plan and damage control booklet are intended to provide ship's officers with clear information on the ship's watertight subdivision and equipment related to maintaining the boundaries and effectiveness of the subdivision so that, in the event of damage to the ship causing flooding, proper precautions can be taken to prevent progressive flooding through openings therein and effective action can be taken quickly to mitigate and, where possible, recover the ship's loss of stability.

2.2 The damage control plan and damage control booklet should be clear and easy to understand. It should not include information which is not directly relevant to damage control, and should be provided in the working language of the ship. If the languages used in the preparation of the plan and booklet are not one of the official languages of the SOLAS Convention, a translation into one of the official languages should be included.

3 Damage control plans

3.1 The damage control plan should be of a scale adequate to show clearly the required content of the plan.

3.2 Isometric drawings are recommended for special purposes. The plan should include inboard profile, plan views of each deck and transverse sections to the extent necessary to show the following:

- .1 the watertight boundaries of the ship;
- .2 the locations and arrangements of cross-flooding systems, blow-out plugs and any mechanical means to correct list due to flooding, together with the locations of all valves and remote controls, if any;
- .3 the locations of all internal watertight closing appliances including, on ro-ro ships, internal ramps or doors acting as extension of the collision bulkhead and their controls and the locations of their local and remote controls, position indicators and alarms. The locations of those watertight closing appliances which are not allowed to be opened during the navigation and of those watertight closing appliances which are allowed to be opened during navigation, according to SOLAS regulation II-1/22.4, should be clearly indicated;

- .4 the locations of all doors in the shell of the ship, including position indicators, leakage detection and surveillance devices;
- .5 the locations of all external watertight closing appliances in cargo ships, position indicators and alarms;
- .6 the locations of all weathertight closing appliances in local subdivision boundaries above the bulkhead deck and on the lowest exposed weather decks, together with locations of controls and position indicators, if applicable; and
- .7 the locations of all bilge and ballast pumps, their control positions and associated valves.

4 Damage control booklets

- 4.1 The information listed in section 3 should be repeated in the damage control booklet.
- 4.2 The damage control booklet should include general instructions for controlling the effects of damage, such as:
 - .1 immediately closing all watertight and weathertight closing appliances;
 - .2 establishing the locations and safety of persons on board, sounding tanks and compartments to ascertain the extent of damage and repeated soundings to determine rates of flooding; and
 - .3 cautionary advice regarding the cause of any list and of liquid transfer operations to lessen list or trim, and the resulting effects of creating additional free surfaces and of initiating pumping operations to control the ingress of water.
- 4.3 The booklet should contain additional details to the information shown on the damage control plan, such as the locations of flooding detection systems, sounding devices, tank vents and overflows which do not extend above the weather deck, pump capacities, piping diagrams, instructions for operating cross-flooding systems, means of accessing and escaping from watertight compartments below the bulkhead deck for use by damage control parties, and alerting ship management and other organizations to stand by and to co-ordinate assistance, if required.
- 4.4 If applicable to the ship, locations of non-watertight openings with non-automatic closing devices through which progressive flooding might occur should be indicated as well as guidance on the possibility of non-structural bulkheads and doors or other obstructions retarding the flow of entering seawater to cause at least temporary conditions of unsymmetrical flooding.
- 4.5 If the results of the subdivision and damage stability analyses are included, additional guidance should be provided to ensure that the ship's officers referring to that information are aware that the results are included only to assist them in estimating the ship's relative survivability.
- 4.6 The guidance should identify criteria on which the analyses were based and clearly indicate that the initial conditions of the ship's loading extents and locations of damage, permeabilities, assumed for the analyses may have no correlation with the actual damaged condition of the ship.

5 Visual guidance to the master

Visual guidance, such as damage consequence diagrams, may be used to provide the master with a rapid means to evaluate the consequence of damage to the ship.

6 Placement on board the ship

6.1 For passenger ships, the damage control plan should be permanently exhibited or readily available on the navigation bridge, as well as in the ship's control station, safety centre or equivalent.

6.2 For cargo ships, the damage control plan should be permanently exhibited or readily available on the navigation bridge. Furthermore, the damage control plan should be permanently exhibited or readily available in the cargo control room, all ship's office or other suitable location.

7 Use of on-board computers

Damage control plans and damage control booklets should be in printed form. The use of on-board computers^{*}, with damage stability software developed for the specific ship, and familiar to properly trained ship's officers can provide a rapid means to supplement the information in the plan and booklet for effective damage control.

8 Shore-based emergency response systems

8.1 A shore-based emergency response system may be used to supplement the damage control booklet referred to in section 4.

8.2 Contact information for gaining access to shore-based facilities together with a list of information required for making damage stability assessments should be readily available.

* Refer to the Guidelines for the on-board use and application of computers (MSC/Circ.891).