
Firefighting Equipment

Notice to ship owners, managers, Masters, Approved Nautical Inspectors, Recognised Organisations and surveyors

This Notice supersedes BMA Information Bulletin No.97

1. Purpose

- 1.1. This Marine Notice provides instructions for the inspection, maintenance, testing and survey requirements for firefighting installations and portable fire extinguishers, and is intended to supplement Regulation 14.2.1.2 of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS Chapter II-2), and manufacturer's maintenance instructions.
- 1.2. This Notice should be read in conjunction with:
 - i. International Maritime Organization (IMO) Assembly Resolutions [A.655\(16\) Use of Halons as Fire Extinguishing Media on Board Ships](#), [A.719\(17\) Prevention of Air Pollution from Ships](#) and [A.951\(23\) Improved Guidelines for Marine Portable Fire Extinguishers](#);
 - ii. IMO Maritime Safety Committee (MSC) Circulars [MSC/Circ.600 Annual Leakage Check of Halon Fire Extinguishing Systems](#), [MSC/Circ.775 Ships with Reduced Halon Quantities](#), [MSC.1/Circ.1275 Unified Interpretation of SOLAS Chapter II-2 on the Number and Arrangement of Portable Fire Extinguishers on board Ships](#), [MSC.1/Circ.1318 Guidelines for the Maintenance and Inspections of Fixed Carbon Dioxide Fire-extinguishing Systems](#) and [MSC.1/Circ.1432 Revised Guidelines for the Maintenance and Inspection of Fire Protection Systems and Appliances](#) as amended by [MSC.1/Circ.1516](#).
 - iii. IMO Sub-Committee on Ship Systems and Equipment (SSE) Circular [SSE.1/Circ.2/Rev.2 Halon Banking and Reception Facilities](#).

2. Application

- 2.1. This Notice applies to all Bahamian ships, except pleasure craft.

3. Background

- 3.1. IMO MSC Circular MSC.1/Circ.1432, as amended by MSC.1/Circ.1516, provides a minimum recommended level of maintenance and inspections for fire protection systems and appliances.
- 3.2. The Bahamas Maritime Authority (BMA) recommends compliance with MSC.1/Circ.1432, as amended, and encourages all Companies¹ operating Bahamian ships to review the circular and implement changes to their safety management system and procedures where necessary.

4. Inspection, maintenance, testing and survey requirements.

- 4.1. Notwithstanding the requirements of this Notice and the IMO Resolutions and Circulars referred to herein, all inspection, maintenance, testing and survey shall take the relevant manufacturer's guidelines into account.
- 4.2. Certain maintenance procedures and inspections may be performed by competent crewmembers, whilst others should be performed only by persons specially trained in the maintenance of such systems. Any aspect of the testing and maintenance of the system which is assessed by the Company to be beyond the competence of the Company's and ship's personnel shall be carried out by a competent specialist maintenance firm. Further guidance on "competent persons" is provided in [BMA Marine Notice 89](#)².
- 4.3. The Company shall ensure that the inspection and maintenance of the whole system meets the requirements of the Recognised Organisation and any recommendations of the installation manufacturer or supplier.
- 4.4. The requirements for portable fire extinguishers are contained within IMO Resolution [A.951\(23\)](#), and section 8 of this Notice.
- 4.5. The requirements for fixed CO₂ fire extinguishing systems are contained within [MSC.1/Circ.1318](#), and section 5 of this Notice.
- 4.6. The requirements for the following fire safety systems are contained within [MSC.1/Circ.1432](#), as amended.
 - Fixed fire detection & alarm systems

¹ The "Company" is the entity responsible for the management of the ship in accordance with the ISM Code. For ships which the ISM Code is not applicable, the Company is the Managing Owner in accordance with Section 52 of the Bahamas Merchant Shipping Act.

² <https://www.bahamasmaritime.com/wp-content/uploads/2021/03/MN089-Competent-Persons-v1.0-ID-116229.pdf>

- Fixed gas fire extinguishing systems (*except fixed CO₂ systems*)
- Fire doors
- Public address & general alarm systems
- Breathing apparatus, 5 year hydrostatic test on bottles.
- Low location lighting
- Water mist, water spray & sprinkler systems
- Fire mains, fire pumps, hydrants, hoses and nozzles
- Foam fire extinguishing systems
- Firefighters' outfits
- Fixed aerosol extinguishing systems
- Portable foam applicators
- Wheeled (mobile) fire extinguishers
- Ventilation systems & fire dampers
- Galley & deep fat cooking fire extinguishing systems
- Fixed dry chemical powder systems

5. Specific requirements for Fixed CO₂ Systems

- 5.1. At least once in every 5 year period, control valves of fixed CO₂ systems are to be internally examined to ensure they can operate freely.

6. Specific requirements for Halon gas systems

6.1. *New installations*

- 6.1.1. In accordance with Regulation 10.4.1.3 of SOLAS Chapter II-2, fire extinguishing systems using Halon 1211, Halon 1301, Halon 2402 and perfluorocarbons are prohibited on all new buildings and new installations on existing vessels.

6.2. *Discharge or loss of pressure of existing Halon gas cylinders*

- 6.2.1. In the event of the discharge or loss of pressure of Halon gas cylinder(s) in an existing installation, the BMA will accept the replenishment of the discharged cylinder(s), if they remain in satisfactory condition.
- 6.2.2. The safety of the vessel and its crew remains paramount and if Halon gas is not readily available, the Company will be required to ensure that the affected space has adequate temporary firefighting capability prior to departure from port.
- 6.2.3. The adequacy of any temporary arrangements and procedures shall be assessed by the Recognised Organisation prior to application for acceptance by the BMA.

6.2.4. Application for acceptance of any temporary arrangements shall be made to the BMA by the Recognised Organisation, in accordance with BMA Information Bulletin No.8, and shall include the items specified in MSC/Circ.775.

6.3. **Phase out of Halon gas**

6.3.1. There is currently no internationally agreed date for the phasing out of Halon gas in existing installations, however there may be local or regional regulations that impose restrictions on the use and/or phase out of Halon. The BMA recommends that Companies operating affected Bahamian ships make themselves aware of any restrictions that may be applied by the country or region in which the ship is trading.

6.3.2. Companies operating ships with existing Halon systems should note that the worldwide stock of Halon is diminishing, and it is strongly recommended that a plan is implemented for the replacement the Halon system on board. See IMO Circular SSE.1/Circ.2/Rev.2 for details of the available facilities.

6.3.3. It should be further noted that where Halon replenishment is not permitted by the country or region in which the ship is operating, the ship may be detained and/or prohibited from leaving port until a new fixed firefighting system is installed.

6.3.4. Details of any proposed replacement of a system containing Halon must be forwarded to the BMA for review by the Recognised Organisation.

7. **Alternative fixed gas firefighting media**

7.1. Alternative firefighting systems referred to in SOLAS Chapter II-2 and the IGC Code³ for protection of machinery and accommodation spaces, pump rooms and cargo spaces may be fitted on board ships, subject to the approval, including any attached conditions, of a Bahamas Recognised Organisation or SOLAS contracting Government. The BMA shall receive prior notification of intention to fit an alternative system which has not been previously accepted by the BMA.

7.2. The BMA accepts the use of (non-asphyxiating) fire extinguishing agents in machinery spaces for which no specific provisions for fire-extinguishing appliances are prescribed under the provisions of SOLAS Chapter II-2, such as "**Novec 1230**" and "**FM 200**" (HFC-227ea). Acceptance of such agents is subject to conditions, agreed on a case-by-case basis, appropriate to the space in question and provided that the space is not connected to an accommodation space.

³ The International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk

8. Number of portable fire extinguishers and spare charges

- 8.1. The number of portable fire extinguishers on board should be determined as follows:
- 8.1.1. **Ships built prior to 01 January 2009** - the number of portable fire extinguishers provided is to satisfy the requirements of the relevant Classification Society. In accommodation spaces, service spaces and control stations on ships of 1,000 gross tonnage and upwards, no less than five (5) portable fire extinguishers are to be provided. Companies are encouraged to apply the provisions of [MSC.1/Circ.1275](#) where practicable.
- 8.1.2. **Ships built on or after 01 January 2009** - the number of portable fire extinguishers to be provided should be determined in accordance with [MSC.1/Circ.1275](#). In accommodation spaces, service spaces and control stations on ships of 1,000 gross tonnage and upwards, no less than five (5) portable fire extinguishers are to be provided.
- 8.2. The minimum number of spare charges carried on board for portable & semi-portable extinguishers shall be in accordance with SOLAS Chapter II-2, namely:
- i. 100% for the first ten (10) extinguishers; and
 - ii. 50% for the remaining extinguishers up to a maximum of sixty (60).
- 8.3. Additional extinguishers of the same type and capacity shall be carried in lieu of spare charges for any extinguishers which cannot be charged on board.

9. Additional Survey Requirements

- 9.1. In surveying the safety equipment on a vessel, Recognised Organisations shall verify that:
- i. all firefighting equipment has been inspected and maintained in accordance with the manufacturer's instructions and the foregoing requirements
 - ii. the manufacturer's maintenance instructions are on board
 - iii. records of inspections, maintenance and pressure tests are maintained, and
 - iv. spare charges or extinguishers are provided in accordance with paragraphs 8.2 and 8.3.
- 9.2. Recognised Organisations shall refer to the BMA, with relevant recommendations, any cases where a Bahamian ship does not satisfy the foregoing requirements, prior to the issue or endorsement of a Cargo Ship Safety Equipment Certificate, Passenger Ship Safety Certificate or any other statutory certificate that relates to safety equipment (e.g., MODU/MOU certificates).

10. Records

10.1. Records shall be maintained on board of the following inspections & testing:

- i. Weekly
- ii. Monthly
- iii. Quarterly
- iv. Annual
- v. Two yearly
- vi. Five yearly
- vii. Ten yearly service
- viii. Other maintenance and testing
- ix. Deficiencies identified and corrective actions performed.

11. Enquiries

11.1. Enquiries relating to this Notice may be addressed to the BMA Inspections & Surveys department at tech@bahamasmaritime.com or by contacting any BMA office.

