



INFORMATION BULLETIN No. 117

Lifeboat Safety – Use of Fall Preventer Devices (FPDs)

Guidance and Instructions for Bahamas Recognised Organisations, Bahamas Approved Nautical Inspectors, Ship Owners, Managers and Masters

1. Purpose

- 1.1. This Bulletin is intended to support existing advice and guidance issued by the Bahamas Maritime Authority (BMA) related to enhancing the safety of personnel when using lifeboats which feature on-load release gear. Since this Bulletin was first issued in August 2008, the use of Fall Preventer Devices (FPDs) has been considered at IMO and detailed guidance is available in Maritime Safety Committee (MSC) circular MSC.1/Circ.1327.
- 1.2. This Bulletin should be read in conjunction with MSC Circulars MSC.1/Circ.1327 and MSC.1/Circ.1206 Rev.1.

2. Application

- 2.1. This Bulletin applies to the following:
 - All ships' lifeboats and rescue boats fitted with on-load release gear as referred to in SOLAS III/20.11.2;
 - All ships' davit launched liferaft automatic release hooks as referred to in SOLAS III/20.11.3;
 - All ships fitted with survival craft launching appliances as referred to in SOLAS III/20.11.1.

3. Accidents with lifeboats

- 3.1. While the number of accidents remains small in comparison with the number of Bahamian ships, the consequences of accidents can be unacceptably high. With this in mind, measures have already been implemented to limit the exposure of crews to the hazard associated with on-load release gear failure by allowing lifeboats to be initially lowered and recovered without personnel onboard during drills.

4. Replacement of hook arrangements

- 4.1. In recognition of the problems associated with this matter, the BMA has agreed procedures with some Recognised Organisations to facilitate the retrofit of modern designs of on-load release gear which feature enhanced safety. All Owners of Bahamian ships are encouraged to assess existing hook arrangements on board in order to identify where improvements, if any, can be made

5. Interim safety measures

- 5.1. The BMA has noted that the use of fall preventer devices (FPDs) has been implemented on many vessels. The use of FPDs allows lowering and recovery of the boat with personnel inside, with enhanced safety and familiarisation benefits.
- 5.2. FPDs are intended to protect against the consequences of an unintended release of the hook(s). The safety pin type consists of a steel pin which passes through the cheek plates of the release gear to physically prevent the hook from releasing by locking it in the engaged position and many modern designs now feature such safety pins.
- 5.3. An alternative method used for older designs which do not feature safety pins is to fit resilient stops or continuous slings across the on-load release between a fixed strong point on the lifeboat and the falls block ring or shackle. The resilient FPD will not prevent the on-load release gear from releasing but will prevent hazardous consequences.
- 5.4. The BMA recognises the overriding authority and the responsibility of the Master to make decisions with respect to safety, as set out in Paragraph

5.2 of the ISM Code and consequently accepts the use of FPDs when advocated by the Company¹.

- 5.5. Where FPDs are used, procedures for their use, inspection and maintenance shall be made available to ship's crew and documented in the ship's Safety Management System. The professional judgement of the Master is necessary in deciding the occasions and circumstances when FPDs are installed and used, such as when the suspension hooks of the craft cannot be secured in a fail-safe condition (i.e. "closed") when at any significant height above the water.
- 5.6. The BMA has no objection to the use of FPDs on Bahamian ships in association with any safety drill or exercise.

6. Using fall preventer devices

- 6.1. Any FPD installed shall be fit for purpose. The proposal to use such a device shall be subject to an engineering analysis to ensure that the device and existing lifeboat structure and arrangements are capable of withstanding any loadings which would result from the failure of the on-load release gear with the boat in the fully-loaded condition and suspended from the davits. A factor of safety of six (6) should be the minimum used in such an analysis. All materials used shall be suitable for use in the marine environment.
- 6.2. Wires or chains shall not be used as FPDs as they do not absorb shock loads.
- 6.3. Resilient FPDs shall be continuous slings or strops of a type which have permanent end loops and shall be of a suitable length to ensure minimal drop in the event of premature release of the hook arrangement. Strops shall be dedicated to lifeboat use and should be suitably identified to ensure that they are not used for any other purpose.
- 6.4. Continuous slings have an advantage over strops in that they possess fewer points of splicing (potential failure points) and can be arranged in shorter lengths. They can also be released in an emergency (when waterborne) by cutting a single member of the sling.
- 6.5. All such FPDs should be protected by an outer cover that protects them from damage or degradation from chemical contamination or ultra-violet

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.

light. The outer covering should not be contributory to the overall tensile strength of the sling or strop.

- 6.6. In selecting FPDs, the Company shall ensure that a comprehensive risk assessment is carried out to ensure that nothing is done to compromise the effectiveness of the operation of the release gear. This is particularly important where the installation of a safety pin is considered. The Company shall not make any modification which adversely affects the strength and type approval of the hook and release gear arrangement.
- 6.7. Where FPDs fitted are synthetic strops or slings, a functional test should be carried out. The function test should demonstrate, to the satisfaction of the Recognised Organisation surveyor, that the equipment performs without interfering in the operation of the lifeboat or launching equipment. The function test is to be carried out at the first Safety Equipment Annual Survey or PSSC Renewal Survey after the date of issue of this bulletin and thereafter at the subsequent 5 yearly load test and thorough examinations as required by SOLAS Ch.III, Reg.20.11.
- 6.8. Companies shall ensure that suitable procedures are implemented to ensure that individuals involved in the lifeboat launching are fully trained, familiar and competent in the maintenance, inspection, installation and removal of FPDs. All FPDs should be thoroughly examined prior to each use and replaced if any signs of damage or significant deterioration are found. The Company should also establish a schedule for overload testing and replacement.
- 6.9. Where FPDs are used, suitable clear and simple warning notices should be placed inside the lifeboat at the release gear access hatches at each end of the boat so as to ensure correct use of the devices.

7. Examples of FPD



Figure 1 – Continuous sling in place over-riding on-load release



Figure 2 - FPD taking load during exercise, simulating premature release of on-load hook. Note that the boat is not waterborne but suspended just above the water – a safety precaution for avoiding injury to personnel or damage to structures during the exercise.

8. Revision History

Rev.3 (10 January 2013) – Format revision, additional details on use of FPDs