



The Bahamas Maritime Authority

BMA INFORMATION BULLETIN No. 117

LIFEBOAT SAFETY – THE USE OF FALL PREVENTER DEVICES (FPD)

**Guidance and Instructions for Ship-owners, Managers, Masters,
Bahamas Recognised Organisations and Bahamas Approved Nautical
Inspectors**

1. INTRODUCTION

- 1.1. This Bulletin is intended to support existing BMA advice and guidance issued relating to enhancing the safety of personnel when using lifeboats which feature on-load release gear.

2. ACCIDENTS WITH LIFEBOATS

- 2.1. While the number of accidents remains small in comparison with the number of vessels in the Bahamas fleet 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 drills¹.

3. REPLACEMENT OF HOOK ARRANGEMENTS

- 3.1. In recognition of the problems associated with this matter the BMA has agreed procedures with some Recognised Organisations to facilitate the retro-fit 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

¹ MSC/Circ.1206 Annex 2 para 2.3.2

4. INTERIM SAFETY MEASURES

- 4.1. The Bahamas Maritime authority has noted that the use of fall preventer devices (FPD) has been implemented on some vessels. Their use allows lowering and recovering of the boat with personnel inside with enhanced safety and familiarisation benefits.
- 4.2. FPD are intended to protect against the effects of an unintended release of the hook. 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.
- 4.3. An alternative method used for older designs which do not feature safety pins is to fit resilient strops 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.
- 4.4. The BMA recognises the overriding authority and the responsibility of the Master to make decisions with respect to safety, as set out in the ISM Code 5.2, and consequently accepts the use of FPD when advocated by the ship management company. In such cases procedures for use, inspection and maintenance are to be 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 FPD are installed and used, such as when the suspension hooks of the craft cannot be secured in a fail safe i.e. closed- condition when at any significant height above the water.
- 4.5. The Bahamas Maritime Authority has no objection to the use of FPD on Bahamian registered ships in association with any safety drill or exercise.

5. USING FALL PREVENTER DEVICES

- 5.1. Any FPD installed must be fit-for-purpose. The proposal to use such a device must 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 6 should be the minimum used in such an analysis. All materials used must be suitable for use in the marine environment.

- 5.2.** Resilient FPD must be continuous slings or strops of a type which have permanent end loops and must be of a suitable length to ensure minimal drop in the event of premature release of the hook arrangement. Strops must be dedicated to lifeboat use and should be suitably identified to ensure that they are not used for any other purpose.
- 5.3.** 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 also can be released in an emergency (when waterborne) by cutting a single member of the sling.
- 5.4.** All such FPD should be protected by an outer cover that protects them from damage or degradation from chemical contamination or ultra-violet light. The outer covering should not be contributory to the overall tensile strength of the sling or strop.
- 5.5.** In selecting FPD Owners must 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 and Owners must not make any modification which adversely affects the strength and type-approval of the hook and release gear arrangement.
- 5.6.** Companies must 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 FPD. All FPD should be thoroughly examined prior to each use and replaced if any signs of damage or significant deterioration are found. Owners should also draw up a schedule for overload testing and replacement.
- 5.7.** Where FPD 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.

Examples of FPD



Continuous sling in place over-riding on-load release



FPD taking load during exercise, simulating premature release of on-load hook. Note 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.