

# MGN 425 (M+F)

# Assessment of Risks for those sleeping on "Dead Ships"

Notice to all Shipowners, Masters, Skippers, Fishermen and Crew

### Summary

The purpose of this note is to draw the attention of owners and crew to the inherent dangers on vessels not properly equipped for overnight sleeping onboard and to give guidance to mitigate the risks. The main points are:

- ensuring a risk assessment is carried out and procedures are in place to deal with any emergencies;
- ensuring that escape routes are kept clear and are known by the crew;
- checking that alarm systems work both on shore and ship's power and that the crew know how to check that they are;
- ensuring that fire precautions are being adhered to.

## 1. Introduction

- 1.1 Three fishermen recently died in an accident while living onboard a fishing vessel alongside in port. The MCA is extremely concerned that safety systems and precautions onboard, intended for use at sea, were proved to be inadequate for use when the vessel's own power generation systems were shut down ("dead ship"). In addition the means of escape were found to be blocked or unusable. There have also been several accidents where, luckily, there have been no fatalities. These range from fires to flooding.
- 1.2 The purpose of this note is to provide guidance on the minimum standards that are deemed acceptable for vessels not normally equipped for onboard sleeping such as some fishing vessels, ferries and dredgers. This applies to vessel greater than 24m in length and less than 500 gross tons as well as those under 24m.

#### 2. Assessment of Risks

- 2.1 A properly structured assessment of risks to crew sleeping onboard a vessel that has been shut down overnight should be carried out and should consider, as a minimum:
  - 2.1.1 Security of moorings;
  - 2.1.2 Vessel emergencies such as fire and flooding;
  - 2.1.3 The possibility of a noxious atmosphere (ie carbon monoxide) developing;
  - 2.1.4 Medical casualties;
  - 2.1.5 Loss of stability;
  - 2.1.6 Response to actions of other vessels:
  - 2.1.7 Means of contacting rescue or other authorities in an emergency;

- 2.1.8 Means of dealing with pollution;
- 2.1.9 Effects of extreme weather.
- 2.2 Many of these functions are, in larger ships, traditionally provided by personnel being on duty overnight. In smaller vessels this is not always practical and other means of achieving the same effect, which can attract the attention of sleeping crew, are needed. This should include a method of communication between the vessel and port authorities (such as a mobile telephone).
- 2.3 The Master/Owner should issue guidance and conduct a properly structured assessment of risks to crew sleeping onboard all vessels that are moored alongside and have been shut down overnight. Where such risks are identified appropriate procedures should be put in place to mitigate them.
- 2.4 The Master/Owner should ensure that all crew members know how to attract the attention of the emergency services (e.g. dial 999 or contact the harbour authority).

#### 3. Alarms

- 3.1 It is recommended that all vessels should have fire (smoke) and bilge alarms fitted with at least two independent power sources. The alarm should be so fitted that it can be heard within the accommodation in areas where crew may be sleeping.
- 3.2 If the vessel is operating on shore power it should be ensured that any alarm systems will operate on that power or a back up system provided to ensure that the alarms will work.
- 3.3 It is strongly recommended that the alarm systems be capable of detecting, not only smoke and high bilge levels but noxious and flammable gases.
- 3.4 A means of setting off the alarm from outside the accommodation should be considered.
- 3.5 There should be a means for those onboard to contact the emergency services to raise the alarm, such as a mobile phone.

# 4. Means of Escape

- 4.1 All escape routes are required to be properly marked, kept free of obstructions and usable. Regular inspections by the Master, Skipper or designated crewmember and recorded in the logbook should ensure that this is carried out. Also the crew should be fully aware of and familiar with the escape routes.
- 4.2 When inspecting the means of escape the following should be considered:
  - 4.2.1 Are the escape routes clearly marked and well lit?
  - 4.2.2 Do all sleeping cabins have at least two separate means of escape to open deck?
  - 4.2.3 Is there a safe means of escape to shore?
  - 4.2.4 If a fire in one location could block the escape, is an alternative available?
  - 4.2.5 Are all doors and hatches in good working order and can they be easily opened, at least from the inside?
  - 4.2.6 Are fire doors self-closing or kept closed (Note: unapproved holdbacks should be removed only electromagnetic holdbacks linked to the fire detection system are acceptable)?

# 5. Shore Power

- 5.1 When the vessel is operating on shore power the following should be considered:
  - 5.1.1 Are any safety systems (e.g. fire/gas detection) not working and are there alternatives?
  - 5.1.2 If the vessel is relying on shore power for basic safety systems, is it safely installed with appropriate circuit breakers and sufficient for the necessary services all working together for safety, such as fire pumps and fire and gas detection systems,

as well as any additional loads for domestic services, such as heating, lighting and ventilation?

- 5.1.3 Is it reliable?
- 5.1.4 If the shore power fails when the crew are asleep will they know?
- 5.1.5 Can the live aboard crew change over onto ship's power?
- **6.** If the crew are having problems contacting the relevant harbour authority about any of the above points or have concerns over their ability to evacuate or reach their vessel this should be discussed with that authority.

#### 7. Fire Precautions

- 7.1 The following points should be considered when assessing the risk of fire:
  - 7.1.1 If heaters are provided are they safe?
  - 7.1.2 Wherever possible LPG and diesel open flame or catalytic heaters should be avoided. If these are permitted and installed is the installation in compliance with MGN 312 (storage of gas and mechanical ventilation)?
  - 7.1.3 Have heaters been regularly serviced?
  - 7.1.4 Are gas and carbon monoxide detectors provided?
  - 7.1.5 Are other heaters clearly away from combustible materials?
  - 7.1.6 Is the ventilation working (a check should be made to ensure that the crew have not tried to block them up)?
  - 7.1.7 Are fire dampers including external ventilation flaps in working order?
  - 7.1.8 Are unapproved cooking or heating appliances being used (e.g. some crew have been found cooking with portable gas cookers in their cabins)?
  - 7.1.9 Free standing heaters should not be used.
  - 7.1.10 Are all electric appliances safe, with correct wiring, fuses (e.g. radios, TV's, toasters, kettles, phone chargers etc.)?
  - 7.1.11 Have the crew been familiarised with these basic safety precautions, including their escape routes and safety systems?
  - 7.1.12 Are fire extinguishers available, serviced and ready for immediate use?
  - 7.1.13 Have the crew been instructed in how to start a fire pump?

#### **More Information**

Seafarer Safety and Health Branch Maritime and Coastguard Agency Bay 1/29 Spring Place 105 Commercial Road Southampton SO15 1EG

Tel: +44 (0) 23 8032 9328 Fax: +44 (0) 23 8032 9251 e-mail: seafarer.s&h@mcga.gov.uk

General Inquiries: 24 Hour Infoline

infoline@mcga.gov.uk

0870 600 6505

MCA Website Address: www.mcga.gov.uk

File Ref: MC11/11/007

Published: September 2010

© Crown Copyright 2010

# Safer Lives, Safer Ships, Cleaner Seas

Printed on material containing minimum 75% post-consumer waste paper

An executive agency of the Department for **Transport**