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## Inspection of Shell Loading Doors on Ro-Ro Ferries

Notice to: Ship Owners, Ship Builders, Certifying Authorities, Surveyors, Masters and Ships Officers.

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### *Summary*

This Guidance Note draws attention to the importance of crewmembers on-board Roll-on Roll-off ferries being aware of the position of the collision bulkhead and the need for it to be kept fully intact whenever the ferry is at sea.

#### Key Points:

- Monthly inspections of shell loading doors
- Additional inspections immediately after every voyage where heavy weather has been encountered
- Notice boards drawing attention to the importance of the extended portion of the collision bulkhead and the need for it to be kept fully intact at sea
- The need for the extended portion of the collision bulkhead to be readily recognisable by crewmembers

### 1. Background

1.1 Following an incident, which occurred when a Roll-on Roll-off ferry encountered heavy weather whilst crossing the English Channel, damage was sustained to the shell loading door (bow visor). As a result, an investigation was carried out by the Marine Accident Investigation Branch (MAIB). The subsequent MAIB Report 1/8/18 was published and identified a number of recommendations.

1.2 This Guidance Note is intended to promulgate these recommendations to the relevant parties.

### 2. Collision Bulkheads

2.1 Due to their design and operations, certain vessels are required to have a collision bulkhead. This is a vertical bulkhead, of watertight construction, which extends from the keel to the bulkhead deck (ie usually the lower vehicle deck on a ro-ro ferry). It has to be located within strictly defined limits (e.g. not

less than 5% of the length of the ship abaft the forward perpendicular). Its purpose is to give protection to the main body of the ship in the event of the fore end being breached due to collision or contact damage.

2.2 In addition, on ships which have a forward superstructure, for example the main vehicle space on a ro-ro passenger ferry, the collision bulkhead may be required to be extended weathertight to the next deck above. This extension need not be fitted directly over the bulkhead below, provided it is not less than 5% of the length of the ship from the forward perpendicular.

2.3 Where an extension of the collision bulkhead is required, it is of vital importance to the ro-ro passenger ferry. Primarily, it acts as a barrier to the ingress of sea water onto the vehicle decks should the fore end of the ship ever become breached due to collision or contact damage. In addition, it acts as a barrier to the ingress of sea water should the bow visor (or bow door) ever fail to function properly.

### 3 Crew Awareness

3.1 The MAIB investigation demonstrated the "vital importance which the extended portion of the collision bulkhead can play in the overall safety of ro-ro passenger ferries against the ingress of sea water." However the investigation also discovered that "only those crew with a very detailed knowledge of the ship's construction were likely to know of the exact location of the extended portion of the collision bulkhead. Moreover the Inspector was left with the impression that few of the ship's crew fully appreciated the importance the collision bulkhead plays in the overall safety of the ship. A situation which probably applies on most ro-ro ferries."

### 4. Recommendations

4.1 The recommendations made by the MAIB have been fully accepted by the Maritime & Coastguard Agency. These are produced in the following paragraphs.

4.2 All owners and managers of ro-ro passenger ferries should arrange for:-

- shell loading doors (e.g. bow visors and hinged bow and stern doors), which are required to be weathertight and fitted in their ferries, to be carefully inspected on a monthly basis and also after every voyage where heavy weather has been experienced.
- Any damage found to be quickly and effectively repaired.
- Records of such inspections to be retained for at least 12 months.

- The Maritime & Coastguard Agency to be promptly notified whenever an inspection reveals damage which could lead to the weathertight integrity being compromised.

4.3 All such ro-ro passenger ferries should have a notice board, placed in a suitable and prominent position on or near the bulkhead, which draws attention to the importance of the extension to the collision bulkhead and the need for it to be kept fully intact whenever the ferry is at sea.

4.4 The extended portion of the collision bulkhead on all ro-ro passenger ferries, especially when the layout is complicated, is to be readily recognisable to crew members, by special marking or painting, by use of diagrammatic sketches or by some other effective means.

5. Owners and managers should take due account of this guidance and ensure adequate record keeping and training of ship staff in accordance with the Safety Management System.

Survey Branch  
105, Commercial Road  
Southampton  
SO15 1EG

Telephone: 023 80 329220  
Fax: 023 80 329104  
Internet: <http://www.mcga.gov.uk>

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