

PART X

MISCELLANEOUS REQUIREMENTS FOR SHIPS WITH SPECIAL CATEGORY OR RO-RO CARGO SPACES

10.1 General

Ro-Ro passenger ships are required to be fitted with access opening indicator lights, supplementary emergency lighting, and TV surveillance in accordance with the Regulations. The requirements also apply to Ro-Ro passenger ships which are not UK ships, while they are within UK territorial waters.

10.2 Access Opening Indicator Lights

10.2.1 Indicators should be provided for all shell doors, loading doors and other closing appliances fitted to openings which if left open or not properly secured could lead to major flooding of the Ro-Ro vehicle or other special category space. The indicator system should be a panel at the navigating bridge consisting of a green indicator light and a red indicator light for each access opening connected to suitable switches at the opening so the green light will be illuminated on the panel for a particular opening only when the door or other closing appliance is both closed and all locking pins, cleats, etc. are secured. All switches or relays should be connected so that if the door or other closing appliances is not fully closed or properly secured the red light on the panel will illuminate. The indicator switches and relays should be series connected to the indicator lights and the power supply for the indicator system should be independent of the power supply for operating and securing the doors or closing appliances.

10.2.2 Position indicator switches should preferably be of the proximity type. As a minimum, the enclosure, including cable termination arrangements should provide a degree of ingress protection to IP67 as defined in British Standard BS EN 60529.

10.2.3 As far as practical, circuits should be arranged to fail safe, i.e. the "closed" indication should not be given upon circuit fault. Lamp test facilities should be included.

10.3 Supplementary Emergency Lighting

10.3.1 The horizontal illuminance at deck level should not be less than 0.2 lux, in the emergency mode, along escape routes from public passenger spaces and, in large public passenger spaces where the absence of adequate illumination would seriously impede escape due to the presence of furniture, glass partitions etc., for example in lounges, restaurants and bars.

10.3.2 In all other public passenger spaces the illumination should be such that the approach to the escape route can be readily seen.

10.3.3 Switches should not be installed in final sub-circuits to supplementary emergency light fittings. In cases where the ship is out of service overnight with the electrical plant shut down, the owner's proposals for safeguarding the light units from discharge should be considered.

10.3.4 It is not possible to describe in detail how the supplementary emergency lighting should be arranged having regard to the various arrangement of spaces that exist on ships. The position and spacing for a particular fitting to obtain the required illumination levels should be based upon the photometric tests made on the lighting fitting in the emergency mode on behalf of the manufacturers. Typically, a minimum illuminance of 0.2 lux can be achieved by 8 watt fluorescent fittings spaced at 10m or more at a height of 2.5 to 4m with no reflectance from the surrounding surfaces. It will not normally be necessary to test the lighting arrangement with a light meter.

10.3.5 Illuminance may fall below 0.2 lux in way of shop counters and shops since they are not part of the escape route.

10.3.6 Supplementary emergency lighting is not necessary between doors if the second escape door can be seen when the first escape door is open.

10.3.7 Supplementary emergency light fittings and associated equipment must be type approved in accordance with the provisions of Merchant Shipping Notice No. M.1645.

10.4 Routine Inspections and Tests

10.4.1 Because of the possibility of failure of the normal lighting supply during testing of the supplementary emergency lighting system or during the subsequent re-charge period, all tests should wherever possible be undertaken at a time of minimum risk.

10.4.2 The routine inspections and tests detailed below should be supplemented and/or amended by any information recommended by the manufacturers for a particular installation, particularly regarding batteries. A record should be kept of any deficiencies which cannot be immediately rectified during the inspection and test. Batteries should be marked with the date of installation and this information should be recorded.

10.4.3 Weekly

An inspection should be made every week to ascertain that:-

- (i) any fault previously recorded has been given attention and the action noted; and

- (ii) every lamp in the system is lit.

10.4.4 Monthly

An inspection should be made at monthly intervals as follows:-

- (i) each fitting should be energised from its battery by simulation of a failure of the supply for a period sufficient only to ensure that each lamp is illuminated;
- (ii) the period of simulated failure should not exceed one-quarter of the rated duration of the lighting fitting;
- (iii) during this period all lights should be examined visually to ensure that they are functioning correctly; and
- (iv) at the end of this test period the supply should be restored and any indicator lamp or device checked to ensure that it is showing that the normal supply has been restored.

10.4.5 Annually

The monthly inspection described above should be carried out in addition to the following:-

- (i) the supplementary emergency lighting installation should be tested and inspected to ascertain that it is complete, in good condition and installed in accordance with the original designs, taking into account any authorised alterations;
- (ii) the battery should be replaced if the manufacturer's recommended battery life is exhausted. If not, carry out the tests below;
- (iii) each fitting should be energised from its battery for a continuous period of one hour, by simulation of failure of the supply;
- (iv) during this period all fittings should be examined visually to ensure that they are functioning correctly; and
- (v) at the end of this test period the supply should be restored and any indicator lamp or device checked to ensure that it is showing that the normal supply has been restored.

10.4.6 Portable hand lamps

An inspection should be made at monthly intervals in accordance with a systematic schedule. Tests and battery replacement should be in accordance with

the manufacturer's recommendation. Such lamps will be located in crew spaces, alleyways, recreational spaces and working spaces normally occupied unless supplementary lighting is provided.

10.5 Television Surveillance

10.5.1 A television system should be installed which shall be capable of transmitting reliable information to the navigation bridge by television on the condition (including position) of bow doors, stern doors, or any other cargo or vehicle loading doors which, if left open or not properly secured, could lead to major flooding of a special category space or Ro-Ro cargo space. Special category spaces and Ro-Ro cargo spaces should be continuously patrolled or should be monitored by a television surveillance system during any voyage so that movement of vehicles in adverse weather, or unauthorised entry by passengers can be observed. The system monitors should be placed at a location that is continuously manned whilst the ship is underway.

10.5.2 The Secretary of State may grant exemption from the requirement for TV surveillance of special category spaces or Ro-Ro cargo spaces, or from continuous patrols for Ro-Ro passenger ships on voyages exceeding 5 hours duration or which carry freight vehicles and their drivers only, providing that the vehicle spaces are thoroughly inspected by a competent person immediately after the loading doors are closed and thereafter on voyage at hourly intervals.

10.5.3 In cases where non-UK registered Ro-Ro passenger ships, operating in UK waters, are not fully in compliance with the requirements but are considered to meet the requirements of SOLAS Chapter II-1 Regulation 23-2 and 42-2, the details should be submitted to the MCA for consideration.