

PART B

CHAPTER 12

NOISE LEVELS – ACCEPTABLE STANDARDS

12.1 Design and Construction

12.1.1 The Passenger Ship and Cargo Ship Construction Regulations contain requirements regarding protection against noise, which is primarily for the purpose of preventing harm to persons from noise in and around machinery spaces. The regulations stipulate maximum permitted levels (e.g. 110 dB(A) within machinery spaces, the requirement to provide a refuge when noise exceeds 90 dB(A), and warning notices where noise exceeds 85 dB(A) at the machinery space entrance). Both the Passenger Ship and Cargo Ship Construction Regulations specify the manner in which measurements must be taken. The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations 1996, as amended and International Regulations for Preventing Collision at Sea, 1972 – Annex III, 1(e) also stipulate maximum noise levels of 110dB(A) and, where practicable, 100 dB(A) at listening posts.

12.1.2 Copies of noise measurements taken for a newbuild vessel or the lead vessel of a series should be provided to MCA for reference and/or comment as required. Occasionally MCA may consider it necessary to witness the measurements, for which no fee is normally charged. Copies of any reports should be retained on the CM --/34/01 file.

12.1.3 Surveyors should not get involved with the acoustic design of the ship, neither should they indicate agreement that acoustic design features are acceptable. Surveyors may, if so requested by the builder or owner (or possibly union), attend to discuss the problems and note their intended action. In all but the most obvious cases it is unlikely that the surveyor, or MCA, will have the expertise to offer solutions or to agree to remedial action. Surveyors are not to act as arbitrators in disputes. A brief report of any such meetings should be included with the noise report in the CM --/34/01 file.

12.2 Control of Noise at Work

12.2.1 The Merchant Shipping and Fishing Vessels (Control of Noise at Work) Regulations 2007; SI 2007/3075, as amended, contain general requirements for risk assessments to be carried out in order to avoid health and safety problems caused by noise, and set requirements for the exposure of individual seafarers to noise. The Regulations state: that employers must conduct a noise assessment; when further action must be taken; and the records to be kept.

12.2.2 The Code of Practice for Controlling Risks due to Noise on Ships, and MGN 352(M+F) advise shipowners, shipbuilders, ship managers and masters

about application of the Merchant Shipping and Fishing Vessels (Control of Noise at Work) Regulations 2007. Surveyors should familiarise themselves with the Code of Practice, together with MGN 352 and chapter 12 of the Code of Safe Working Practices for Merchant Seafarers (CoSWP)(2015 Edition). In addition, MGN 377 provides guidance on noise from music and entertainment.

12.2.3 MGN 352 highlights that the responsibility for assessment of noise levels as it affects seafarers rests with the shipowner or shipbuilder and that a survey should be carried out and a copy of the report retained on board.

12.2.4 The shipowner is responsible for ensuring that seafarers' exposure to noise is within the limits set out in the 2007 Regulations. Where there is a risk that exposure limits are exceeded, the shipowner should take measurements and keep records of these and any remedial action that needs to be taken. If MCA receives complaints from seafarers about noise levels, these records should be reviewed. Seafarers working in noisy environments should also be offered health surveillance including audiometry so that any impact on their hearing can be monitored and any harmful effects addressed.

12.2.5 The Code of Practice for Controlling Risks due to Noise on Ships takes the form of recommendations only on how to comply with the Control of Noise Regulations, noting that some are made mandatory through regulation (e.g. as indicated in paragraph 12.2.3 above). Measurements are recorded and where practicable modifications made to reduce noise to an acceptable level.

12.3 Audibility of warning sounds and speech

12.3.1 Separate to this is the issue of audibility of warning sounds or speech. Recommendations were made following the MARCHIONESS accident investigation that noise may have been a contributory factor, and that noise levels on ships should be checked.

12.3.2 Class III to VI(A) inclusive passenger ships should have noise measurements taken, when required by the MCA, and the completed Sound Measurement Record (MSF 1605) should be placed on the CM -/33/01 file. Further measurements should be taken whenever modifications to the ship or entertainment equipment are made that may affect the noise level. These measurements may be undertaken by MCA if necessary, where a sound meter is available (refer MSIS 30 Chapter 8) and the surveyor is familiar with its use.

12.3.3 If a vessel fails to meet the recommended levels by a significant amount, a letter should be sent requiring the owner or builder to take steps to reduce the noise level.

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