

PART A

CHAPTER 4

CARGO SHIP SAFETY CONSTRUCTION

4.1 Legal Requirements

4.1.1 The requirements for survey and certification in order to apply SOLAS are contained in the Merchant Shipping (Survey and Certification) Regulations 1995, SI 1995/1210, as amended. These regulations are to be read in association with MSN's 1613 and 1751. The regulations apply to UK cargo ships and to other cargo ships whilst in UK waters. They apply to vessels on domestic voyages as well as international voyages.

4.2 Definitions

4.2.1 Definitions of terms relating to cargo ship construction and surveys related to the issuance of a Cargo Ship Safety Construction Certificate are described in SI's 1995 No.1210 and 1997 No.1509, as amended.

4.2.2 The MS (Additional Safety Measures for Bulk Carriers) Regulations 1999, SI 1999 No.1644 define a 'bulk carrier' as follows: -

- a ship constructed with single deck, top-side tanks and hopper side tanks in cargo spaces and intended primarily to carry solid bulk cargo; or
- an ore carrier, where 'ore carrier' means a seagoing single deck ship having two longitudinal bulkheads and a double bottom throughout the cargo region and intended for the carriage of ore cargoes in the centre holds only; or
- a combination carrier, where 'combination carrier' means a tanker designed to carry oil or alternatively solid bulk cargo.

Reference should also be made to IMO Resolution MSC.277(85), which clarifies the term 'bulk carrier' for ships constructed on or after 1 January 2009.

4.3 Responsibility

4.3.1 Surveyors

4.3.1.1 In the majority of cases, the surveys for the issue of the Safety Construction (SafCon) Certificate are undertaken by the classification society

for classed vessels. However MCA retains responsibility for initial approval of structural fire protection measures and means of escape unless ACS is in effect (see Part A Chapter 27). It is not always practical for these arrangements to be fully examined during survey, so the following provides guidance on what is considered reasonable and practicable. During the construction of a new ship – or the initial survey of a ship changing to UK flag – the MCA would expect to confirm that the arrangements are acceptable. Specific guidance for existing ships 'flagging – in' to the UK is in Part B Chapter 6.

4.3.1.2 For ships under construction, MCA will approve the relevant plans and survey the arrangements to confirm the requirements are met. Where a ship is being constructed under survey by a classification society, who are regularly surveying the ship, it may be reasonable to request the Class surveyor to carry out some or all of the survey work on behalf of MCA, subject to strategic spot checks by the MCA. If this is the case, MCA should issue a formal Instrument of Appointment unless agreed by prior special arrangements. Appointments should be issued by Survey Operations Branch, see procedure MCA 320.

4.3.2 Partial Declaration

4.3.2.1 Before a classification society can issue the first SafCon Certificate to a ship under the UK flag they are required to obtain a Partial Declaration (MSF 1108) from MCA to the effect that the ship complies with the requirements for structural fire protection, means of escape and fire safety measures of unattended machinery spaces (unless special arrangements have been made for the classification society to survey these aspects).

4.3.2.2 For subsequent surveys, the classification society has the responsibility to ensure that no alterations have been made since the initial survey. In such cases and provided all other details and conditions shown on the previous certificate remain the same a partial declaration will not be necessary. Where an owner wishes to make alterations, or if unapproved alterations have been made which are discovered, the classification society should contact the MCA for advice. The owners should be informed that a fee for MCA survey may be necessary.

4.3.3 Acceptance for in-water survey (IWS)

4.3.3.1 MCA only requires notification from class of IWS if the survey is to be conducted outside of the survey window; if the provisions of MGN 217 are not fully met; and/or if the ship is more than 15 years old.

4.3.4 General inspections

4.3.4.1 As the MCA will not normally be involved with the intermediate or renewal SafCon surveys, the opportunity should be taken to carry out spot checks, as far as reasonable and practicable (guided by 'flagging-in' advice), as part of a general inspection in conjunction with other surveys or audits.

4.3.5 *Unclassed ships*

4.3.5.1 Where existing ships are not classed, the SafCon survey and certification will be undertaken by MCA in entirety. Unclassed vessels must comply with the same standards as classed ones - see MGN 322 and **Part B Chapter 11**.

4.4 **Surveys Required**

4.4.1 The Harmonised System of Survey and Certification (HSSC) applies requiring:

- **Initial Survey,**
- **Annual Survey,**
- **Intermediate Survey,**
- **Renewal Survey,**
- **an Inspection of the Outside of the Ship's Bottom** (a minimum of two inspections are required during any five year period at intervals not exceeding 36 months. Inspections should normally be carried out with the ship out of the water, however consideration may be given to alternate inspections being carried out with the ship afloat, in accordance with MGN 217).

4.5 **Pre- Survey Actions**

4.5.1 The following items shall be checked prior to commencing the survey:

- SIAS
- MCA Survey Files
- Exemption Certificates
- New Legislative requirements
- Class Survey Status (via password protected websites)
- PSC Inspection history

Remarks from previous surveys and outstanding deficiencies must be resolved to the satisfaction of the surveyor before the issue of a renewal Cargo Ship Safety Construction Certificate, or the annual endorsement of an existing certificate. Any overdue or postponed conditions of class must be followed up with the attending class surveyor or in the absence of a class surveyor discussed with Survey Operations Branch.

4.5.2 The surveyor/s should ensure that sufficient time will be available for the survey and should liaise with owners beforehand, noting that various options may be available such as more time in port, sailing with the ship for suitable short voyages, providing more than one surveyor.

4.5.3 Where work is to be carried out on behalf of another administration a written request must be obtained from that administration requesting the MCA to carry out the work on their behalf. For REG ships fees are charged at the wider market rate (see Part C Ch2.3).

4.5.4 Surveys should only be commenced on receipt of a completed "Application for Survey" form (MSF 5100) and after sufficient fees have been received. Further guidance on fees is described in Part C, Chapter 2 of these instructions.

4.5.5 The relevant Business Support Unit administration team processes the application. CERS/SVD must be interrogated to ensure that the correct ship is on the system; if the vessel is not yet on the system (e.g. newbuild, flag-in), the Administrator (TST) should be contacted, who will check the details and arrange for the vessel to be added to the Single Vessel Database (SVD) if appropriate. A "job control sheet" (MSF 5108) is produced which is then tracked for charter standard purposes. This is then passed to the Manager, or other person nominated by them, who then appoints the Lead Surveyor (LS) for the survey.

4.6 Items to be surveyed

4.6.1 The survey is to be carried out using the relevant instructions, guidance notes and HQ advice, which may be found on MLD/SCMS. IMO Resolution A.1053 (27) as amended details the items to be covered. Surveyors should be mindful of their own health and safety during surveys and take account of all guidance provided by MCA as well as their professional judgement in relation to the prevailing circumstances.

4.6.2 The MS (Survey and Certification) Regulations require surveys of the ship's structure, machinery and equipment. These surveys are to ensure that the hull structure, including structural fire protection, watertight doors, main and auxiliary machinery, boilers and other pressure vessels and the electrical system are in satisfactory condition and in compliance with the regulations and SOLAS requirements as applicable.

4.6.3 Life-saving and fire protection regulations require the provision of emergency source of power and means of stopping machinery and a full survey of these items will be required as part of the SafCon survey by Class. MCA will check satisfactory functioning of the equipment only when surveying and issuing the Cargo Ship Safety Equipment Certificate.

4.6.4 For bulk carriers, under the MS (Additional Safety Measures for Bulk Carriers) Regulations 1999, SI 1999/1644 it is necessary to conduct surveys additional to those specified in the 'Survey and Certification Regulations'. These additional surveys are to be conducted in accordance with the IMO Guidelines on an Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, as adopted IMO Resolution A. 744 (18), as amended.

4.6.5 While there is no specific UK regulation at present requiring tankers to be surveyed in accordance with IMO Resolution A. 744 (18) its guidelines are incorporated into Class rules which should be complied with – see Part B Chapter 11 of these instructions. SOLAS Chapter XI-1 requires bulk carriers and tankers over 500 GT to be surveyed under A.744(18) as amended.

4.7 Post Survey Actions

4.7.1 Deficiencies

4.7.1.1 The lead surveyor is responsible for recording and closing out any deficiencies found during the survey/s in the SIAS database, in accordance with the requirements of Part C Chapter 4 of these instructions.

4.7.2 Declarations & Certificates

4.7.2.1 The requirements relating to certificates, i.e. type, format, extension, cancellation, issuing authority etc., are given in the Survey and Certification Regulations.

4.7.2.2 In the case where Partial Surveys are held, guidance in Part A Chapter 1, section 1.9.2.1, of these instructions should be followed.

4.7.2.3 On completion of a survey, the lead surveyor prepares the certificate, following the guidance in Part C Chapter 3 of these instructions.

4.7.2.4 When satisfactory surveys have been completed a **Cargo Ship Safety Construction Certificate** (MSF 1103) should be issued – to cargo ships of 500 GT or over on international voyages, valid for a period not exceeding 5 years, unless a **Cargo Ship Safety Certificate** (MSF 1110) is to be issued to such ships – see Part A Chapter 8.

4.7.2.5 Cargo ships of 500GT or over that are not engaged on international voyages are required by the regulations to be issued with a **United Kingdom Cargo Ship Safety Construction Certificate**. This form is not currently available; Survey Operations Branch should be contacted when a SafCon survey is requested for such vessels.

4.7.2.6 Annual/Intermediate Survey Endorsement

4.7.2.6.1 On completion of the annual or intermediate survey, the certificate should be endorsed accordingly.

4.7.2.6.2 The 2nd or 3rd annual survey must be an intermediate survey; the endorsement for the same needs to be made by deleting “annual” in the endorsement panel on page 2 of the certificate. When conducting the 3rd annual survey in particular this needs to be borne in mind to ensure that one of the surveys is marked (and conducted) as “intermediate”.

4.7.2.6.3 Any endorsements made to the owner's copy of the certificate should also be recorded on the file copy of the certificate (or by adding a photocopy of the endorsement page to the file), and on the electronic version of the form, on return to the office.

4.7.3 Review of Exemptions

4.7.3.1 Any exemption or equivalents must be reviewed to ensure they are still current and that the qualifying conditions are complied with. Guidance on exemptions and equivalents are described in Part B Chapter 4 of these instructions.

4.7.4 Documents & Records

4.7.4.1 The table below describes the minimum documents to be completed and filed following a survey.

Item	Record
Record on SIAS?	Yes MSF 1602/3 survey & inspection deficiencies
Place copy on registered file, CM.../15/01 or CM.../15/02 (as appropriate)?	Yes Cargo Ship Safety Construction Certificate. Complete/ Partial MCA Declaration. MSF1602/3 forms. Annual/intermediate endorsement Relevant test reports/ results Drawings Photographs Exemptions
Minute required on registered file?	Yes
Report Class Related deficiency to Survey Operations Branch?	Yes MSF 1923

4.7.5 Fees

4.7.5.1 The Job Control Sheet must be closed out and sent to the relevant Business Support Unit so that fee accounts may be balanced and relevant refunds made to the customer.

4.8 Flow Chart

None

4.9 Special Instructions and Guidance

None

4.10 References

4.10.1 Guidance and advice on survey procedure is given in **Part B, Chapters 1 to 4** of these instructions. There are no specific Instructions for the Guidance of Surveyors **or aide memoires** but advice may be gleaned from parts of Instructions on:

- 'Passenger Ship Construction – Classes I, II and II(A)',
- 'Load Line',
- 'Fire Protection Arrangements',

in the MCA's Statutory Publication:

- 'Construction - Fire Protection, Fire Detection and Fire Extinction Implementing SOLAS Chapter II-2',

and in:

- **IMO Resolution A.1053(27), which replaces Resolution A.997(25).**

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