#### PART A

#### CHAPTER 1

# PASSENGER SHIP SURVEY (SOLAS – UK CLASSES I-II(A))

# 1.1 Legal Requirements

1.1.1 The requirement for these passenger ships to be surveyed and certificated for safety requirements is contained in the Merchant Shipping (Survey and Certification) Regulations 2015; SI 2015/508, as amended. These regulations are to be read in association with MSN's 1613 and 1751, as amended. The regulations apply to all UK passenger ships and to non UK ships whilst in UK waters.

# 1.2 Responsibility

- 1.2.1 The MS (Survey and Certification) Regulations 2015 set out the persons who are permitted to carry out surveys. The MCA (on behalf of the Secretary of State) remains responsible for the issue of the Passenger Ship Safety Certificate (PSSC). In practice hull and machinery surveys on UK Class I, II and II(A) passenger ships are carried out in order to maintain both their statutory certification and Class status. To avoid duplication of survey items Class surveyors have been authorised to conduct hull and machinery surveys on all ships on MCA's behalf. The attending MCA surveyor is thus allowed to focus their attention closely on the more critical aspects of passenger ship safety. In general the UK has authorised the UK approved classification societies (recognised organisations) to survey hull, machinery, electrical and control systems, while MCA deal with survey of Fire and Safety Equipment, Navigation, Safe Manning and Safety Management and Security Audits. High Speed Craft (HSC) are included in the scope of authorisation and would be treated as Class II ships for this purpose.
- 1.2.2 Although Class are authorised to carry out hull and machinery surveys and are responsible for the work their surveyors undertake, MCA must be satisfied that all aspects of the PSSC have been completed satisfactorily. This is normally achieved by close co-operation between the Class and MCA surveyors, dividing the survey items between them in accordance with this guidance. MCA surveyors are expected to exercise due diligence in following MCA procedures, guidance and instructions and likewise the classification society is responsible for the work undertaken by their surveyors. In exceptional circumstances, should the MCA have evidence that the PSSC survey items have not been completed satisfactorily or where Class are unable to comply with MCA requirements, the MCA reserve the right to carry out appropriate corrective measures or even carry out the entire PSSC survey.

# 1.3 Surveys Required

- 1.3.1 The Harmonised System of Survey and Certification (HSSC), described in Part B Chapter 2 of these instructions, applies to passenger ships and requires the following surveys:
  - Initial Survey,
  - · Renewal Survey,
  - Inspection of the Ship's Bottom, (see Part B Ch 2.4.5) this inspection is required annually, in conjunction with the Renewal Survey. When the inspection is not conducted with the ship out of the water (e.g. on a slip or in dry-dock) then an in-water inspection of the bottom must be carried out in accordance with MGN 217, as amended. At least two inspections of the ship's bottom must be conducted with the ship out of the water in any 5 year period such inspections to be at intervals not exceeding 36 months.

# 1.4 Pre-survey Actions

- 1.4.1 The following items should 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 the Passenger Ship Safety 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.

- 1.4.2 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.
- 1.4.3 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).
- 1.4.4 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.

1.4.5 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 "Survey Works Order sheet" 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.

## 1.5 Items to be surveyed

- 1.5.1 The survey is to be carried out using the relevant instructions, guidance notes and HQ advice, which may be found on MLD/SCMS. 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.
- 1.5.2 Regulation 6 of SI 2015/508 stipulates the survey requirements. The survey is to ensure that the hull structure, main and auxiliary machinery, boilers and other pressure vessels, the electrical system, radio installations, the fire protection arrangements, LSA, navigational equipment, nautical publications, pilot boarding and embarkation arrangements, navigation lights & signals and the stability data (intact and damaged) are in compliance with regulations and are in all respects, satisfactory.
- 1.5.3 An *aide memoire*, MSF 5506, listing items that should be surveyed is available from the Master List of Documents and SCMS library.

### 1.6 Post Survey Actions

#### 1.6.1 Deficiencies

1.6.1.1 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.

### 1.6.2 Declaration and Certificates

- 1.6.2.1 The requirements for the issue of certificates, i.e. type, format, extension, cancellation, issuing authority etc., are in the Merchant Shipping (Survey and Certification) Regulations 2015 as amended.
- 1.6.2.2 Where a ship is on a continuous survey regime, guidance in section 1.8.4 of this chapter should be followed.

- 1.6.2.3 On completion of a survey, the lead surveyor prepares the certificate, following the guidance in Part C Chapter 3 of these instructions.
- 1.6.2.4 When satisfactory surveys have been completed every passenger ship should be issued with an appropriate **Passenger Ship Safety Certificate** (PSSC) (MSF 1200, 1201 or 1235), valid for a period not exceeding 12 months from the date of expiry of the existing certificate.

## 1.6.3 Review of Exemptions

1.6.3.1 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.

#### 1.6.4 Documentation and Records

1.6.4.1 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/33/01	Yes Passenger Ship Safety Certificate Operational Limits MSF 1230 Complete/ Partial MCA Declaration Class Declaration(s) Radio Declaration (MSF 1816) & Record of Equipment (MSF 1818) MSF 1602/3 Complete/ Partial Aide memoire Continuous Survey Schedule, if applicable Relevant test reports/ results Drawings Photographs Exemptions							
Minute required on registered file?	Yes							
Report Class issues to Survey	Yes							
Operations Branch?	MSF 1923							

### 1.6.5 Fees

1.6.5.1 The Survey Works Order 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. See Part C Chapter 2 of these instructions.

#### 1.7 Flow Chart

None

#### 1.8 **Special Instructions and Guidance**

## 1.8.1 Methodology

- 1.8.1.1 The surveys of passenger ro-ro ferries should be carried out in a similar manner to that conducted on Class I passenger ships.
- 1.8.1.2 The system relies on close co-operation between the attending MCA and Class surveyors in order to avoid duplication of survey items. To achieve this, a meeting with the Class surveyor should be held at the outset and at completion of the PSSC survey.
- 1.8.1.3 It is recognised that under this system some surveys may be carried out when the MCA surveyor is not present onboard (e.g. in-water hull surveys). In these circumstances the MCA surveyors should consider the partial declaration for such surveys, following discussion with the operators and/or classification society, to ensure that the survey has been carried out by an exclusive surveyor and in a satisfactory manner.
- 1.8.1.4 It is also recognised that the survey of a particular item may not be completed in any one visit. In these circumstances the Class surveyor will make a partial declaration for the work completed during that particular visit. In this way the sum total of such declarations will together comprise the 'Partial Declaration' from Class that will enable the PSSC to be issued.
- 1.8.1.5 The list below indicates the survey items which should normally be the responsibility of the Class surveyor. It is recognised that the surveyors may, by mutual agreement, share a task that has been designated by the checklist as the responsibility of the MCA. In this case the Class surveyor must include any such items surveyed by themselves in their partial declaration. The partial declaration forms are MSF 1216, 1217 and 1218.

# Anchor and cables Guard-rails & bulwark Tank examinations Tank pressure tests Sea connections Storm valves

Non Ro-Ro Ships

Weighted lever cocks

Windlass

Windows & sidescuttles

## **Ro-Ro Ships**

Anchor and cables Guard-rails & bulwark Tank examination Tank pressure test Sea connections Storm valves Weighted lever cocks Windlass

Windows & sidescuttles

Main engines Main engines

Boilers Boilers

Evaporators/RO plant Evaporators/RO plant

Gearing Gearing
Generators Generator trips Generator trips

Switchboard rev current/ pref. trips Switchboard rev current/ pref. trips

Megger test
Propellers
Rudders

Megger test
Propellers
Rudders

Shafting arrangements Shafting arrangements

Start air system Start air system

Ships side doors hose test
Construction of watertight doors
Subdivision marks

Ship side door installations
Watertight door installations
Load line and subdivision marks

Accommodation ladder operation

and testing

Emergency generator Emergency generator

Bilge pumping functional testing

Bilge strums Bilge injection

Steering gear/emergency steering Steering gear/emergency steering

1This is an MCA item but may be checked by Class when checking Load Line Marks

- 1.8.1.6 The Class surveyor should advise the MCA surveyor of any serious deficiencies that are found during survey and together agree corrective action.
- 1.8.1.7 On completion of the survey the declaration for hull and machinery should be completed by the Class surveyor and given to the MCA prior to issue of a PSSC. This should include any comments from the Class surveyor relating to deficiencies not rectified during refit, any significant repairs or alterations surveyed and any outstanding conditions of Class. This declaration, in conjunction with the collected partial declarations (where appropriate) will provide the basis for the issue of the PSSC.
- 1.8.1.8 The MCA surveyor should complete the relevant declaration before the PSSC is issued. In circumstances where the MCA surveyor has carried out all the surveys and no declaration has been received from Class, then the MCA surveyor must ensure that the full Declaration is completed (including hull and machinery), together with verification that all items on the checklist have been completed.

#### 1.8.2 MCA attendance at drydock

1.8.2.1 Dry-docking is usually an important time when many hull and machinery survey items are addressed. In general, MCA will attend out of water surveys of passenger ships in order to liaise with Class and to progress other safety survey items. There may be occasions when all MCA survey items can be

covered in other ways, in which case the Area Operations Manager/Surveyor-in-Charge may decide that attendance at drydock is unnecessary.

- 1.8.2.2 The following criteria should be considered when deciding on whether MCA attendance is required:
  - At newbuild, or for the first docking after flag-in (or at flag-in if this coincides with PSSC renewal);
  - Following reported bottom or side damage to the ship;
  - When any structural modifications affecting the hull are made to the ship;
  - Age of ship and service history.
- 1.8.2.3 The reason for any non-attendance should be justified and documented in the CM 33/01 file.

## 1.8.3 Radio Surveys

- 1.8.3.1 Authorised persons have been appointed to undertake the survey of radio equipment, MGN 392 refers. Authorised persons are listed on MCA's public website.
- 1.8.3.2 Any request for a company to be authorised is to be referred to Survey Operations Branch in HQ.
- 1.8.3.3 The authorised person will charge the owner for their survey service.
- 1.8.3.4 The declaration will be completed in full, in clear text and signed by the radio technician of the authorised person.
- 1.8.3.5 The original declaration and record of equipment must be given to the MCA surveyor responsible for the passenger ship survey (in a similar manner to Class completing the partial declaration of Class items, as part of the passenger ship survey). Any delay can cause a delay in the issue of the Passenger Certificate.
- 1.8.3.6 When the MCA surveyor has all partial declarations of survey (hull & machinery, radio and safety MCA items), the Passenger Certificate may be issued by MCA.
- 1.8.3.7 MCA will retain all partial declarations of survey on file.
- 1.8.3.8 The Marine Office surveyors should charge for any additional office time involved.

# 1.8.4 Continuous Survey Regime

1.8.4.1 Due to the size and complexity of modern passenger ships and because of the demanding schedules imposed on these ships, there has been

acceptance by MCA of a continuous survey regime (formerly referred to as 'partial survey regime' or sometimes referred to as 'Zone Surveys'). The basis of the continuous survey regime is that the survey of the whole ship, its equipment and manning is broken down into a number of smaller, more manageable partial surveys. These are scheduled and carried out within the one year duration of the Passenger Certificate. Typically the ship is split into a number of discrete areas, often in line with the ship's main fire zones (but other methods will be considered) and each area is surveyed separately. Additional surveys are required to examine aspects which cannot be constrained by zones e.g. bottom inspection, witnessing fire and boat drills, emergency generator and lighting etc.

1.8.4.2 Following a partial survey, the surveyor must complete a partial declaration and place it on the relevant CM File. The surveyor must also clearly indicate on the CM File which elements of the survey have been completed and which are outstanding. The survey aide memoire (MSF 5506) may be used for this purpose.

#### 1.8.4.3 Points to consider are: -

- A continuous survey schedule must be prepared by the owner and agreed by MCA prior to commencement. A sample continuous survey schedule can be found on the Survey Operations Branch microsite (the sample schedule uses horizontal division of the ship for surveys, however this can be amended to vertical fire zones as appropriate).

  Note: if used, the survey schedule must be checked for completeness against aide memoire MSF 5506, it does not replace the aide memoire;
- The dates of partial surveys are normally arranged to coincide with the ship's port schedule, therefore some flexibility is required. Each and every item required to be surveyed for the issue of the Passenger Certificate must be surveyed annually (i.e. within 12 months) in accordance with the validity of the Passenger Certificate. To allow for flexibility of survey dates each partial survey must be carried out within 3 months prior to the due date for that partial survey. In all cases, all surveys must be complete prior to the issue of the Passenger Certificate, see example shown in the table at Annex 1;
- Class surveys of individual components and spaces and tanks are surveyed on a 5-year schedule as part of the maintenance of classification.

# 1.8.5 Operational Limits

1.8.5.1 For vessels which have had Stockholm Agreement damage stability assessed for a significant wave height less than 4.00 metres and greater than 1.50 metres, the Operational Areas section of MSF 1230 should include the wording 'Damage stability has been assessed for operations in sea areas with a significant wave height not exceeding \*\*\*metres as defined in Directive

2003/25/EC'. This is to ensure that the limitation is on the area of operation, not a specific wave height limit which would result in a cancelled sailing on a particular day.

# 1.9 References

- 1.9.1 Further advice can be found in the various Instructions for the Guidance of Surveyors, relating to:
  - 'Passenger Ship Construction: Classes I, II and II(A)',
  - 'Survey of Life Saving Appliances: Volume 1',
  - 'Fire Protection Arrangements',
  - 'Survey of Lights and Signalling Equipment',

and in the MCA's Statutory Publications:

- 'Safety of Navigation, Implementing SOLAS Chapter V'
- 'Construction Fire Protection, Fire Detection and Fire Extinction Implementing SOLAS Chapter II-2'

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Annex 1: Example of Continuous Survey Regime

Month																			
Survey		MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB		MAR	APR	MAY	JUN	JUL
Zone 1	ш	*									<b>∢</b> ·····				*				
Zone 2	REGIME			*									<b>4</b> ····				*		
Zone 3						*										<b>∢</b>			*
Zone 4	SURVEY							*						Ш					
Zone 5	ÜR							*						DATE					
Zone 6										*									
Zone 7	<u>8</u>										*			RENEWAL					
<b>Bottom Inspection</b>	NE NE					*								REN		<b>◆</b> ···			*
M/C shutdowns- Emergency	CONTINUOUS										*			PC					*
Generator & Lighting	RT OF															•	•••••	•••••	
Fire and Boat Drill	START					*										<b>▼</b> ····			*
Radio	S												*						
Declarations From Class													*						
Operational Limitations													*						
Documentation													*						

Permitted survey period -3 months \*