

SOUTH AFRICAN MARITIME SAFETY AUTHORITY



SAFETY SURVEY CHECKLIST: CLASS I, II, IIA, VII, VIII) SOLAS CONVENTION VESSEL GROSS TONS >500GT

The various Acts and Regulations place the onus on the owner and in some cases the master as well, to ENSURE that the vessel and the crew comply with the requirements of the regulations at all times.

PURPOSE: To *Assist and Guide* the Vessel Owner/Owner Representative to prepare the vessel for a survey.

SAMSA SURVEYORS: To *ensure* that the Owner, Master and Crew comply with relevant Legislation as well as Industry Safety Standards, they do not act as vessel superintendent and therefore do not release the Owner, Master and Crew from their accountability and responsibility to ensure that the vessel complies with Legislation and Best Industry Practices.

OWNER/OWNERS REPRESENTATIVE DECLARATION:			
Vessel Name	<input type="text"/>	Inspection Date	<input type="text"/>
Official Number	<input type="text"/>	Length (m)	<input type="text"/>
Gross Tons	<input type="text"/>	kW or HP	<input type="text"/>
I, being the <u>responsible person</u> for the abovementioned vessel, have read and completed the checklist, in preparation for the vessel's Hull Survey. I further understand that should the vessel not be ready for survey, the SAMSA SURVEYOR may terminate the survey/audit and that I will be invoiced as per SAMSA Policy.			
Responsible Person (Full Name)	<input type="text"/>	Signature	<input type="text"/>

MSA Section 223. Surveyor may direct that defects be made good.—(1) If upon the inspection of a vessel a surveyor finds that the provisions of section 73 or 221 or of the maritime occupational safety regulations *are not being complied with*, or that the vessel is *not equipped* as required by the construction regulations, the lifesaving equipment regulations, the radio regulations, the collision regulations or any other applicable regulations which may have been made or not marked as required by the load line regulations, or that the equipment is not in good condition, or that the deck lines or load lines are *not being properly maintained*, or that the master and crew *cannot demonstrate* the related competency at their place or places of duty, he shall give notice in writing to that effect to the owner or master, pointing out the deficiencies or defects and requiring that they be made good. (2) A copy or every notice so given shall be transmitted by the surveyor to the proper officer at any port at which a clearance for that vessel may be requested, and a clearance shall not be granted, and **the vessel shall be detained**, until a certificate under the hand of a surveyor is produced stating that the deficiencies or defects have been supplied or made good.

APPLICATION:

Ship type: Cargo, Passenger, Bulk and Polar

Note: For the purpose of this check list, a “Convention Ship” is a ship of 500GT or over which operates on international or short international voyages.

SAFE ACCESS	
<i>SAMSA surveyors have instructions to issue a “prohibition order” requiring that all work on board be halted and access to the vessel be denied until safe access is provided to the satisfaction of the surveyor, this includes enclosed space.</i>	
ACCOMMODATION LADDERS AND GANGWAYS	Access equipment must be of good construction, sound material and adequate strength, free from patent defect and properly maintained. Gangways should not be used at an angle of more than 30° from the horizontal, unless designed and constructed for use at greater angles. Gangways should not be fixed to the ship's railings unless designed for such use. If rigged in an open section in the ship's bulwark or railings, any remaining gaps should be adequately fenced.
ABBREVIATIONS	
MSA Const. S of N MN MED COLREG IFSL	<i>Merchant Shipping Act, No57 of 1951</i> <i>Construction Regulations, 1968</i> <i>Safety of Navigation Regulations, 1968</i> <i>Marine Notice</i> <i>Ships Medicine and Medical Appliance Regulations, 1991</i> <i>Collision Regulations</i> <i>ICASA Frequency Spectrum License</i>
MOS LL SRA COCOP LSA RIR COSWP	<i>Maritime Occupational Safety Regulation, 1994 as amended</i> <i>Load Line Regulations, 1969 as amended</i> <i>Ship Registration Act, 1998 as amended</i> <i>Carriage of Charts and Publication Regulations, 2002 as amended</i> <i>Life Saving Appliances Regulations, 1968</i> <i>Radio Installation Regulations, 2002</i> <i>Code of Safe Working Practises for Fishing Vessels (edition 2003)</i>

1. DOCUMENTATION

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Registration Certificate (Ship Registration Act 1998)	The original Certificate of Registry must be on board. The information on the certificate must be correct.
2	International Load Line Certificate (MSA section 204 to 207)	An International Load Line Certificate must be issued under the provisions of the International Convention on Load Lines, 1966, to every ship which has been surveyed and marked in accordance with the Convention. (LL Convention article 16; 1988 LL Protocol article 18)
3	International Load Line Exemption Certificate (LL Convention)	An International Load Line Exemption Certificate must be issued to any ship to which an exemption has been granted under and in accordance with article 6 of the Load Line Convention.
4	Intact stability booklet (SOLAS II-1/B-1/8)	Every cargo ship of 24 metres and over must be inclined on completion and the elements of their stability determined. The master must be supplied with a Stability Booklet.
5	Damage control plans and booklets (SOLAS II-1/B-1/8) & (SOLAS II-1/B-2/17)	On cargo ships, there must be permanently exhibited plans showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof, and the arrangement for the correction of any list due to flooding. Booklets containing the aforementioned information must be made available to the officers of the ship.
6	Minimum safe manning document (SOLAS V/14)	Every ship to which chapter I of the Convention applies must be provided with an appropriate safe manning document or equivalent issued by the Administration as evidence of the minimum safe manning.
7	Fire Safety training manual (SOLAS II-2/E/15)	A training manual must be written in the working language of the ship and must be provided in each crew mess room and recreation room or in each crew cabin.
8	Fire Control plan (SOLAS II-2/E/15)	General arrangement plans must be permanently exhibited for the guidance of ship's officers, showing clearly for each deck the control stations, the various fire sections together with particulars of the fire detection and fire alarm systems and the fire- extinguishers appliances.
9	On board training and drills record (SOLAS II-2/E/15)	Fire drills must be conducted and recorded in accordance with the provisions of SOLAS.
10	Fire safety operational booklet (SOLAS II-2/E/15)	The fire safety operational booklet must be in the working language and contain the necessary information and instructions for the safe operation of the ship and cargo handling operations in relation to fire safety.
11	Training manual and on-board training aids (SOLAS III-2/B/1/19)	Training manual and training aids for the live-saving appliances must be on-board and available to all crew. (To be found in each crew mess and recreation room)
12	Certificates for masters, officers or ratings (STCW, Article VI, reg I/2)	Certificates for masters, officers or ratings must be kept available in their original form on board the ships on which the holder is serving.
13	International Oil Pollution Prevention Certificate (MARPOL Annex I reg 5)	The certificate is supplemented with a Record of Construction and Equipment for ships other than Oil Tankers (Form A) or a Record of Construction and Equipment for Oil Tankers (Form B), as appropriate.
14	Oil Record Book (MARPOL Annex I regulation 20)	Every oil tanker of 150 GT and above and every ship of 400 GT and above other than an oil tanker must be provided with an oil Record Book, Part I (Machinery space operations) & Part II (Cargo / ballast operations).
15	Shipboard Oil Pollution Emergency (MARPOL Annex 1, reg 26)	Every oil tanker of 150 GT and above and every ship other than an oil tanker of 400 GT and above must carry on board a Shipboard Oil Pollution Emergency Plan approved by the Administration.
16	Garbage Management Plan (MARPOL, Annex V, reg 9)	Every ship of 400 GT and above and every ship which is certified to carry 15 persons or more must carry a garbage management plan which the crew must follow

17	Garbage Record Book (MARPOL annex V, reg 9)	Every ship of 400 GT and above and every ship which is certified to carry 15 persons or more must be provided with a Garbage Record Book.
18	International Air Pollution Prevention Certificate (IAPP) (MARPOL annex VI, reg 6)	An international Air Pollution Prevention Certificate (IAPP) must be issued to any ship of ship of 400 GT or above engaged in voyages to ports or offshore terminals.
19	Voyage data recorder system- certificate of compliance. (SOLAS V/20)	The voyage data recorder system, including all sensors, must be subjected to an annual performance test.
20	Cargo Securing Manual (SOLAS VI/5.6 and VII/5)	All cargoes, other than solid and liquid bulk cargoes, cargo units and cargo transport units, must be loaded, stowed and secured throughout the voyage in accordance with Cargo Securing Manual approved by the Administration.
21	Document of Compliance (SOLAS IX/4)	A document of compliance must be issued to every company which complies with the requirements of the ISM Code. A copy of the document must be kept on board.
22	Safe Management Certificate (SOLAS IX/4)	The Administration or an organization recognized by it must, before issuing the Safety Management Certificate, verify that the company and its shipboard safety management operate in accordance with the approved safety management system.
23	International Ship Security Certificate (ISSC) (SOLAS XI-2 & A of ISPS)	An International Ship Security Certificate (ISSC) must be issued to every ship by the Administration or an organization recognized by it to verify that the ship complies with the marine security provisions of
24	Ship Security Plan and associated records (SOLAS XI-2 & A of ISPS)	Each ship must carry on board a ship security plan approved by the Administration.
25	Continuous Synopsis Record (CSR) (SOLAS XI-1/5)	Every ship to which Chapter I of the Convention applies (i.e. every ship of 500 GT or more engaged on international voyages) must be issued with a Continuous Synopsis Record.
26	Cargo Ship Safety Construction Certificate (SOLAS I/12)	A certificate called a Cargo Ship Safety Construction Certificate must be issued after survey to a cargo ship of 500 GT and over which satisfies the requirements for cargo ships on survey.
27	Cargo Ship Safety Equipment Certificate (SOLAS I/12)	A certificate called a Cargo Ship Safety Equipment Certificate must be issued after survey to a cargo ship of 500 GT and over which complies with the relevant requirements. A Record of Equipment for the Cargo Ship Safety Equipment Certificate (Form E) must be permanently attached.
28	Cargo Ship Safety Radio Certificate (SOLAS I/12)	A certificate called a Cargo Ship Safety Radio Certificate must be issued after survey to a cargo ship of 300 GT and over, fitted with a radio installation, including those used in life saving appliances, which complies with the requirements. A record of Equipment for the Cargo Ship Safety Radio Certificate (Form R) must be permanently attached.
29	Cargo Ship Safety Certificate (SOLAS I/12)	A certificate called a Cargo Ship Safety Certificate may be issued after survey to a cargo ship which complies with the relevant requirements of chapters. A Record of Equipment for the Cargo Ship Safety Certificate (Form C) must be permanently attached.
30	Exemption Certificate (SOLAS I/12)	When an exemption is granted to a ship under and in accordance with the provisions of SOLAS, a certificate called an Exemption Certificate must be issued in addition to the certificates listed above.
31	DOC with the special requirements for ships carrying dangerous goods	The Administration must provide the ship with an appropriate document as evidence of compliance of construction and equipment with the requirements of regulation II-2/19 of SOLAS.
32	Dangerous goods manifest or stowage plan (SOLAS VII/4.5 & VII/7-2)	Each ship carrying dangerous goods in packaged form must have a special list in accordance with the classification set out in the IMDG Code, the dangerous goods on board and the location thereof.
33	Certificate of Class	Class Survey Status most recent Quarterly listing of survey items.
34	Medical Certificates (ILO Convention No. 73)	Medical Certificates for seafarers should be valid and kept aboard.

35	International Tonnage Certificate (1969)	An International Tonnage Certificate (1969) must be issued to every ship, the gross and net tonnage of which have been determined in accordance with the Convention. (Tonnage Convention article 7)
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2. ADDITIONAL CERTIFICATION AND DOCUMENTATION

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Official log book (MSA sec 182, 133 & 182)	A Log Book must be on board and have been correctly filled in with regard to occurrences on board.
2	Articles of agreement	Articles are correctly filled in and up to date. (MSA Sect 102)
3	Ships Manoeuvring data Bridge procedures guide	Providing information on the vessel speed corresponding to Slow, Half and Full ahead and time elapsed and distance travelled to stop in the water when going from full ahead to full astern ("crash-stop"). Information to be displayed on the bridge.
4	Compass Deviation Card/ Book (S of N regs)	Confirm that a table or curve of residual deviations for the magnetic compass is available on board. Verify the deviation book is properly maintained.
5	Medical locker certificate (MSA Sect 167 & 168)	A current certificate of inspection (validity = 1 year) from a Doctor or Pharmacist on board as well as the <i>Ship Captains Medical Book</i> .
6	Liferaft servicing certificates (SOLAS III/B/20)	Every inflatable liferaft must be serviced at intervals <12 month at an approved servicing stations, or where in impracticable, the Administration may extend this period to 17 months.
7	Liferaft hydrostatic release certificates (SOLAS III/B/20)	Hydrostatic release units, other than disposable hydrostatic release units must be serviced at intervals <12 month at an approved servicing station, or where impracticable, the Administration may extend this period to 17 months.
8	Occupational Safety (MOS regs)	A copy of the Maritime Occupational Safety Regulations, 1994, must be on board. One of the ships officers must be appointed (in writing) as the safety officer.
9	Cargo Gear (MOS regs)	A register of the ship's lifting appliances and cargo handling gear must be onboard. Wires, blocks and shackles must have their SWL clearly marked on them and must be regularly checked for excessive wear.
10	Log book entries: (SOLAS III/B/I/19)	Records regarding on board training and instruction of new crew members in use of the ship's life-saving appliances including survival craft equipment and in the use of the ship's fire-extinguishing appliances, < two weeks after joining the ship.

3. NAVIGATION

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Navigation lights SOLAS V/22 & Colregs	All lights must be operating correctly; colour and intensity of lights must be within specification
2	Signalling lamp (SOLAS Ch V, Reg 11)	Operating from ship's power and portable battery power source is required.
3	Sound signals Colregs	A ships whistle and bell is required. Vessels > 100m also require a "gong".
4	Pilot boarding arrangements	Pilot boarding arrangements should be according to resolution A.889(21) and to MSC/Circ. 568/ Rev.1, Required boarding arrangements for pilots
5	Anchors (S of N Reg. 62)	Vessels are to be fitted with anchors with chains which can rapidly be deployed.
6	Shapes Colregs	3 x black spheres able to be rigged to show vessel "Not Under Command", "At anchor" or "Aground".
7	Depth (SOLAS Ch V, Reg 12)	An echo sounder must be fitted.
8	Compass (SOLAS Ch V, Reg 12)	1 x magnetic compass capable of taking terrestrial bearings and 1 x magnetic steering compass mounted in binnacles on the ships centerline are required. A gyro compass must be provided on vessels constructed on or after 1 September 1984, with the master or a repeated places so that its display is clearly readable from the steering position

9	Compass Deviation Info (SOLAS V 19 2.2.3)	The validation of a deviation card is one year. A compass deviation book may be maintained in lieu of having the compass swung annually by a qualified compass adjuster.
10	Radar (SOLAS Ch V, Reg12)	All vessels constructed on or before 01.09.1984 must be fitted with a radar. Vessels >1600 GT, constructed prior to this date, also require a radar. Vessels >10.000 GT require 2 radars.
11	Nautical Charts & Publications (SOLAS Ch V)	Charts for the area of operation are to be corrected and up to date.
12	Bridge Visibility (SOLAS CH V, Reg 22)	Visibility from the navigation bridge must be adequate for all operations

4. LIFE-SAVING EQUIPMENT & DISTRESS SIGNALS

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Flags (S of N) Reg 54(3)	A full set of flags is required.
2	Lifesaving signal card (SOLAS V Reg. 29)	Table showing the life-saving signals to be used by ships, aircraft or persons in distress must be available.
3	Rocket parachute flares (SOLAS III Reg. 6.3)	12 SAMSA approved rocket parachute flares stowed on or near the navigation bridge. Pyrotechnics renewal at the expiry date or 3 years from manufacture.
4	Line throwing appliance (SOLAS III Reg. 18)	One line throwing appliance capable of firing at least 4 rockets and lines.
5	Lifebuoys (SOLAS III Reg. 7 and 32)	Lifebuoys should be placed according to approved safety plan. All ships must have min 8 lifebuoys. <i>(any specifications on lifebuoys with lines, MOB lights?)</i>
6	Lifejackets (SOLAS III Reg. 7.2.2 & 32.2)	A SAMSA approved lifejacket must be provided for every person on board the ship and in addition a sufficient number of lifejackets must be carried for persons on watch and for use at remotely located survival craft stations.
7	Immersion suit (SOLAS III Reg.32.3)	At least three immersion suits for each open lifeboat complying with the requirements of section 2.3 of the LSA Code or; one immersion suit for every person on board the ship. However the ship must carry thermal protective aids in addition to the thermal protective aids carried in liferafts and lifeboats for persons not provided with immersion suits. Immersion suits to be provided for all persons on board unless the vessel operates in warm climates. (Applicable to all ships from 01.07.2006)
8	Survival crafts Liferafts (SOLAS III Reg. 26)	All cargo ships >100m must carry an additional liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is practicable. Such life raft(s) may be securely fastened so as to permit manual release.
9	Life & rescue boats:	General inspection to be conducted as per SOLAS requirements
10	Operational readiness, Maintenance & inspection (SOLAS III Reg. 20.11)	Vessel must demonstrate records of periodic servicing of launching appliances and on-load release gear.
11	Radio life-saving appliances	To be checked in accordance with radio surveyor checklist; checked by radio surveyor.
12	Muster list and emergency instructions (SOLAS III Reg. 8 & 37)	Muster lists including manning of fire parties and emergency procedures in working language posted in conspicuous places throughout the ship including:1.navigating bridge; 2.engine room; 3.crew accommodation
13	Alarm System (SOLAS III Reg. 6.4)	The system must be audible throughout all of the accommodation and normal crew working spaces. The alarm must continue to function after it has been triggered until it is manually turned off or is temporarily interrupted by a message on the public address system

5. FIRE PROTECTION, DETECTION AND EXTINCTION

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Maintenance, testing and inspections (SOLAS II-2/14.2.2)	The maintenance plan for the fire-fighting system and appliances should be available on board.
2	Fire mains and hydrants: Ready availability of water supply (SOLAS II-2/10.2.2)	In cargo ships with periodically unattended machinery space or when only one person is required on watch, there must be immediate water delivery from the fire main system at a suitable pressure.
3	Isolating valves (SOLAS II-2/10.2.1.4)	Valves should be clearly marked and operating freely
4	Number and position of hydrants (SOLAS II-2/10.2.1.5)	The number and position of hydrants must be such that at least two jets of water not emanating from the same hydrant, one of which must be from a single length of hose, may reach any part of the ship normally accessible to passengers or crew while the ship is being navigated and any part of any cargo space when empty.
5	International shore connection (SOLAS II-2/10.2.1.7)	Ships of 500 GT and upwards must be provided with at least one international shore connection complying with the Fire Safety System Code, located as shown on the Fire Control Plan.
6	Fire pumps & Emergency (SOLAS II-2/10.2.2.2)	Should be operational as per SOLAS requirements.
7	Fire hoses and nozzles (SOLAS II-2/10.2.3.1.1)	Fire hoses must be of non-perishable material approved by the Administration and must be sufficient in length to project a jet of water to any of the spaces in which they may be required to be used. Each hose must be provided with a nozzle and the necessary couplings. <i>(Nozzle types: jet or spray or combination and numbers off?)</i>
8	Portable fire extinguishers (SOLAS II-2/10.3)	Portable fire extinguishers must comply with the requirements of the Fire Safety System Code and must be serviced by SAMSA accredited station.
9	Machinery spaces containing oil –fired boilers or oil fuel units (SOLAS II-2/3.31)	Machinery spaces of category A containing oil-fired boilers or fuel oil units must be provided with any one of the following fixed fire extinguishing systems: A fixed gas fire-extinguishing system or a fixed high-expansion foam fire extinguishing system or a fixed pressure water-spraying fire extinguishing system which complies with the provisions of the Fire Safety System Code.
10	Machinery spaces containing internal combustion machinery (SOLAS II-2/3.31)	Machinery spaces of category A containing internal combustion machinery must be provided with any one of the following fixed fire extinguishing systems: A fixed gas fire-extinguishing system or a fixed high-expansion foam fire extinguishing system or a fixed pressure water-spraying fire extinguishing system complying with the provisions of the Fire Safety System Code.
11	Machinery spaces containing steam turbines or enclosed steam engines (SOLAS II-2/10.5.3)	In spaces containing steam turbines or enclosed steam engines having in the aggregate a total output of not less than 375 kW, any one of the following fixed fire extinguishing systems must be provided if such spaces are periodically unattended: A fixed gas fire-extinguishing system or a fixed high-expansion foam fire extinguishing system or a fixed pressure water-spraying fire extinguishing system complying with the provisions of the Fire Safety System Code.
12	Fixed fire fighting systems for machinery & cargo spaces (SOLAS II-2/10.5.5)	Fixed fire extinguishing arrangements and systems should be operational and fully functional for survey. See additional requirements for vessels above 2000 GT.
13	Spaces with flammable liquids (SOLAS II-2/10.6.3)	Paint lockers must be protected by : 1. A CO2 system; or 2. A DP system; or 3. A sprinkler system.
14	Deep-fat cooking equipment (SOLAS II-2/10.6.4)	Deep-fat cooking equipment must have an automatic or manual fire-extinguishing system, a primary and backup thermostat with an alarm to alert the operator in the event of failure of either thermostat; arrangements for automatically shutting off the electrical power upon activation; an alarm for indicating operation of the fire-extinguishing system; and controls for manual operation of the fire-extinguishing system which are clearly labelled for ready use.
15	Fire-extinguishing in cargo spaces (SOLAS II-2/10.7)	A ship engaged in the carriage of dangerous goods in cargo spaces must be provided with a fixed carbon dioxide or inert gas fire-extinguishing system complying with the provisions of the Fire Safety System Code.

16	Fire-fighter's outfits (SOLAS II-2/10.10)	Fire-fighters outfits must comply with the Fire Safety System Code. Ships must carry at least two fire-fighters` outfits.
17	Means of escape (SOLAS II-2/13.3.4)	At all levels of accommodation there must be provided at least two widely separated means of escape from each restricted space or group of spaces.
18	Means of escape from machinery spaces on cargo ships (SOLAS II-2/13.4.2)	Two means of escape must be provided from the machinery space. In the steering gear space, a second means of escape must be provided when the emergency steering position is located in that space unless there is a direct access to the open deck.
19	Protection of machinery spaces Installation (SOLAS II-2/7.4)	A fixed fire detection and fire alarm system must installed in: 1. Periodically unattended machinery spaces; and 2. Machinery spaces where the installation of automatic and remote control systems and equipment has been approved in lieu of continuous manning of the space; and 3. the main propulsion and associated machinery , including the main sources of electrical power, are provided with various degrees of automatic or remote control and are under continuous manned supervision from a control room.
20	Accommodation spaces (SOLAS II-2/7.5.5)	Accommodation and service spaces and control stations of cargo ships must be protected by a fixed fire detection and fire alarm system.
21	Manual call points (SOLAS II-2/7.7)	Manually call points complying with the Fire Safety System Code must be installed in the accommodation spaces, service spaces and control stations
22	Control of air supply to spaces (SOLAS II-2/5.2)	Inlets and outlets of all ventilation systems must be capable of being closed from outside. It must be easily accessible and clearly and marked.
23	Helicopter facilities additional fire safety measures (SOLAS II-2/18.5)	Helideck should have in close proximity: 1. Two DP extinguishers having a total capacity > 45 kg. 2. CO2 extinguishers of a total capacity > 18 kg 3. A suitable foam application system consisting of monitors or foam-making branch pipes capable of delivering foam to all parts of the helideck in all weather conditions in which helicopters can operate.

6. ENGINE ROOM, MACHINERY AND ELECTRICAL REQUIREMENTS

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Fire hazards	A general survey of the vessel's ER spaces is to be conducted for fire hazards.
2	Oil fuel piping (SOLAS II-2/4.2.2.5.2)	External high- pressure fuel delivery lines between the high-pressure fuel pumps and fuel injectors must be protected with a jacketed piping system capable of containing fuel from a high-pressure line failure. The jacketed piping system must include a means for collection of leakages and arrangements must be provided with an alarm in case of a fuel oil line failure.
3	Fuel oil tanks (SOLAS II-2/4.2.2.3)	Fuel oil, lubricating oil and other flammable oils must not be carried in forepeak tanks.
4	Watertight doors	Remotely operated watertight doors, should be tested and found satisfactory to open from both sides.
5	Air pressure systems (SOLAS II-1/34)	The main starting air arrangements for main propulsion internal combustion engines must be adequately protected against the effects of backfiring and internal explosion in the starting air pipes.
6	Ventilation system in machinery spaces (SOLAS II-1/35)	Machinery spaces of category A must be adequately ventilated so as to ensure that when machinery or boilers therein are operating at full power in all weather conditions, an adequate supply of air is maintained to the spaces for the safety and comfort of personnel and the operation of the machinery.
7	Communication between Bridge and machinery space (SOLAS II-1/37)	At least two independent means must be provided for communicating orders from the navigation bridge to the position in the machinery space or in the control room from which the engines are normally controlled.
8	Engineers` alarm (SOLAS II-1/38)	An engineers` alarm must be provided to be operated from the engine control room or at the manoeuvring platform and must be clearly audible in the engineers` accommodation.
9	Main source of electrical power and lighting (SOLAS II-1/41.1.1)	The main source of electrical power must consist of at least two generating sets.

10	Emergency electrical power (SOLAS II-1/43)	A self-contained emergency source of electrical power must be provided. This source of electrical power may either be a generator or an accumulator battery.
11	Precautions against shock, fire & electrical hazards (SOLAS II-1/45)	All electric cable and wiring external to equipment must be at least of a flame – retardant type and must be so installed as not to impair their original flame-retarding properties.
12	Unattended machinery spaces (SOLAS II-1/46)	Every ship must be provided with documentary evidence, to the satisfaction of the Administration of its fitness to operate with periodically unattended machinery spaces.
13	Steering gear (SOLAS II-1/29 & 30)	Every ship must be provided with a main steering gear and an auxiliary steering gear to the satisfaction of the administration. The main steering gear and the auxiliary steering gear must be so arranged that the failure of one will not render the other one inoperative.
14	Machinery controls (SOLAS II-1/31)	The main propulsion machinery must be provided with an emergency stopping device on the bridge which must be independent of the navigation bridge control system.
15	Bilge pumping arrangements (SOLAS II-1/21)	An efficient bilge pumping system must be provided, capable of pumping from and draining any watertight compartments other than spaces permanently appropriate for carriage of freshwater, water ballast, oil fuel or liquid cargo for which other efficient means of pumping are provided, under all practical conditions.
16	Bilge pumping alarm (SOLAS II-1/48)	An audible and visible bilge alarms for machinery spaces, which are not normally manned, must be provided in the engine room and wheelhouse.
17	Accident prevention in working spaces	Working spaces are to be surveyed for safe working conditions.

7. ACCOMMODATION, GALLEY, FOOD AND CATERING

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Accommodation, Food and catering	Accommodation spaces are to be surveyed according to Crew Accommodation Regulations 1961 and MLC

8. SHIP MARKING

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Ships marking	Confirm the Ship Identification Number is permanently marked either on the stem of the ship or on either side of the hull amidships, port and starboard or on either side of the superstructure, port and starboard or on the front of the superstructure.

9. LOAD LINE & WATERTIGHT INTEGRITY

CHECK	ITEM	NOTES, GUIDANCE AND REFERENCE
1	Load line marks	A general survey of the loadline markings and vessel drafts should be conducted.
2	Water tight integrity (S of N Reg 7)	The as-designed watertight/weather-tight integrity of all bulkheads, doors and hatches must be maintained. The surveyor may require that the watertight integrity of doors or hatches be proven by hose test or other suitable means. The surveyor may want to sight the vessels stability book to confirm the vessels enclosed volume.
3	Factory (S of N Reg 7)	If the factory is part of the enclosed volume, all openings must be able to be closed weather-tight e.g. Scuppers, offal chutes, etc.
4	Forepeak isolation valve	Fore-peak isolation valve must be in working condition, unobstructed & clearly marked.
5	Water on deck	Adequate freeing ports and scuppers must be fitted to allow for the rapid clearing of water in all conditions.
6	Railings/Bulwarks	Guard rails, stanchions and bulwarks must be in good condition and freeing ports must not have been welded closed.
7	Door Sills	A minimum <u>sill height of 305 mm</u> is required on the main deck and 152 mm on the Superstructure decks.

8	Side scuttles	Side scuttles situated below the main deck or on spaces which form part of the enclosed volume above the main deck (e.g. 1 st tier of superstructure, foc'sle) are to be provided with efficient deadlights.
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10. LIFTING APPLIANCES

CHECK	ITEM	NOTES
1	Lifting appliances (MOS)	All davits and cranes are to be clearly marked with their safe working loads. Any blocks used for fishing should also have a SWL marked on them.
2	Wires (MOS)	Main trawl wires and working wires/strops are to be in good condition. There should not be more than 10 broken strands in any length equal to 8 times the wire diameter.
3	Blocks/Shackles (MOS)	Blocks and shackles must be checked for excessive wear and the SWL should be marked on them.

11. ADDITIONALLY REQUIREMENTS FOR PASSENGER VESSELS

CHECK	ITEM	NOTES
1	Surveys	Passenger ships will be subject to surveys specified in SOLAS I General provisions
2	Stability (construction)	Chapter II Construction section 24, 25, 26 Reg 8, 9 special req concerning pax ship stability and construction
3	Stability (WT doors) (SOLAS II/B-4/21)	Drills using WT doors and daily operational requirements of WT door testing should be as per SOLAS II Part B-4 Reg 21 section 42 for vessels constructed > 01.01.2009
4	Stability (flooding) (SOLAS II/B-4/22-1)	Flooding detection should be in all water tight (WT) spaces for all passenger vessels constructed after 01.07.2010 as per SOLAS Ch II Part B-4 Reg 22-1 section 43
5	Emergency power & lighting (SOLAS II/D/42)	Emergency source of electrical power should be situated aft of collision bulkhead for vessels constructed after 01.09.1984 and should supply emergency lighting.
6	Safety centre (SOLAS II-2/G/23)	Passenger ships constructed on or after 1 July 2010 shall have on board a safety centre complying with the requirements of <i>Chapter II-2 Part G reg 23 section 27</i>
7	Life Saving Appliances & Arrangements	Information on passengers should be as per SOLAS Ch III LSA Part B Section II Reg 27
8	Life Saving Appliances & Arrangements	Decision support system for masters of passenger ships as per SOLAS Ch III Part B Reg 29
9	Life Saving Appliances & Arrangements	Weekly Fire & Abandon drills should be as per SOLAS Ch III Part B Reg 30
10	Life Saving Appliances & Arrangements	Personal life-saving appliances as per SOLAS Ch III Part B Reg 22
11	Ship Security Alert (ISPS)	Passenger ships, including high-speed passenger craft, constructed before 1 July 2004, not later than the first survey of the radio installation after 1 July 2004 shall be fitted with a SSA as per SOLAS chapter XI-2 section 6
12	Passenger Ship Safety certificate	Instead of certificates mentioned in Section 1: 26-29 every passenger vessel shall have aboard a Passenger Ship Safety Certificate.

12. ADDITIONALLY REQUIREMENTS FOR POLAR CLASS VESSELS (*Polar Class (PC)* means the ice class assigned to the ship by the Administration or by an organization recognized by the Administration based upon IACS Unified Requirements)

CHECK	ITEM	NOTES
1	Polar Class certificate (SOLAS XI-1/1)	The certificate referred to in this regulation shall be issued either by the Administration or by any person or organization recognized by it.
2	Operational assessment (PC Ch 1)	In order to establish procedures or operational limitations, an assessment of the ship and its equipment shall be carried out.

3	Polar Water Operational Manual (PC Ch 2)	To provide the owner, operator, master and crew with sufficient information regarding the ship's operational capabilities and limitations in order to support their decision-making.
4	Stability and subdivision (PC Ch 4)	PC vessels shall have sufficient stability in intact conditions when subject to ice accretion and vessels of category A and B, constructed on or after 1 January 2017, shall have sufficient residual stability to sustain ice-related damages.
5	Watertight and weather-tight integrity (PC Ch5)	All closing appliances and doors relevant to watertight and weather-tight integrity of the ship shall be operable. Chapter 5 Polar code.
6	Machinery (PC Ch 6)	Machinery installations are to be capable of delivering the required functionality for safe operation of ships under the anticipated environmental conditions.
7	Fire Safety/Protection (PC Ch 7)	PC vessels should ensure that fire safety systems and appliances are effective and operable, and that means of escape remain available so that persons on board can safely and swiftly escape to the lifeboat and liferaft embarkation deck under the expected environmental conditions.
8	Life Saving appliances (PC Ch 8)	PC vessels should provide for safe escape, evacuation and survival of passengers under ice conditions..
9	Safety of Navigation (PC Ch 9)	2 independent echo-sounding devices Clear view astern Means to prevent ice accretion on antennas Protection for hull sensors Enclosed bridge wings (Cat A & B vessels >01.01.2017) 2 Non-magnetic means of displaying heading 1 GNSS compass or equivalent (for vessels >80°) 2 search lights controlled from bridge to light 360° manually initiated flashing red light visible from astern (ice-breaker escort)
10	Manning and training (PC Ch12)	Masters, chief mates and officers in charge of a navigational watch shall be qualified in accordance with chapter V of the STCW Convention and the STCW Code (Basic & advanced training for tankers & passenger vessels). PC Ch 12

13. ADDITIONALLY -REQUIREMENTS FOR BULK VESSELS

CHECK	ITEM	NOTES
1	Enhanced survey report file (SOLAS XI-1/2)	Bulk carriers must have a survey report file and supporting documents complying with paragraphs 6.2 and 6.3 of Annex A and Annex B of resolution A. 744 (18)- Guidelines on the enhanced program of inspections during surveys of bulk carriers and oil tankers.
2	Cargo information (SOLAS VI/2 and XII/10)	The shipper must provide the master or his representative with appropriate information, confirmed in writing, on the cargo, in advance of loading. In bulk carries, the density of the cargo must be provided in the above information.
3	Document of authorization for the carriage of grain (SOLAS VI/9; International Code for the Safe Carriage of Grain in Bulk, section 3)	A document of authorization must be issued for every ship loaded in accordance with the regulations of the International Code for the Safe Carriage of Grain in Bulk either by the Administration or an organization recognized by it or by a Contracting Government on behalf of the Administration.
4	Bulk Carrier Booklet (SOLAS VI/7 & XII/8; Code of Practice for the Safe Loading and Unloading of Bulk Carriers [BLU Code])	To enable the master to prevent excessive stress in the ship's structure, the ship loading and unloading solid bulk cargoes must be provided with booklet referred to in SOLAS regulation VI/7.2. The booklet must be endorsed by the Administration or on its behalf to indicate that SOLAS regulations XII/4, 5, 6 and 7, as appropriate, are complied with. Alternatively, the required information may be contained in the intact stability booklet.