

ANNUAL SURVEY CHECKLIST FOR GAS CARRIER

Ship Name:

Report No.:

I.R. No.:

DOCUMENTATION
<p>STATUTORY CERTIFICATES</p> <p>Valid Statutory certificates available on board.</p>
<p>APPROVED TRIM & STABILITY INFORMATION</p> <p>Confirmation of availability of trim and stability booklet approved by administration. IRS Rules, Part 3, Ch.1, Cl. 1.4</p>
<p>LOADING INSTRUMENT</p> <p>Availability of an approved loading instrument together with it's operational manual and verification of test cases (IRS Rules, Part 3, Ch. 5, Cl. 1.3)</p>
<p>MANOEUVRING BOOKLET</p> <p>Confirming that the manoeuvring booklet is on board and that the manoeuvring information is displayed on the navigating bridge</p>
<p>FIRE CONTROL PLANS</p> <p>Verification of proper posting of fire control plans (including duplicate sets permanently stored in a prominently marked weathertight enclosures outside deckhouse</p>
<p>STEERING GEAR ENTRIES REQUIRED BY SOLAS/FLAG</p> <p>Verification of entries made in the ship's log for departure.</p>
<p>DAMAGE STABILITY</p> <p>Availability of damage stability information (Cargo vessel > 80 m length after 10/07/08 and length > 100 m from 01/02/1992)</p>
<p>LOADING MANUAL</p> <p>Verified that vessel has an approved Loading Manual. (IRS Rules, Part 3, Ch. 5, Cl. 1.3)</p>
<p>I.G. SYSTEM OPERATIONAL MANUAL</p> <p>Verification for availability of I.G. Instruction manual (operation, maintenance, safety, health hazard etc.)</p>
<p>DAMAGE CONTROL PLANS</p> <p>Verification that damage control plans are available</p> <p>Applicable to all passenger vessels and for cargo vessels greater than 500 GT and constructed on or after 1st Feb 1992)</p>
<p>CARGO TANK RELIEF VALVES</p> <p>Verification of certificate for cargo tank relief valve setting and sealing of the relief valves giving details regarding place, date and certifying authority for setting of relief</p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

valves
<p>NATIONAL REQUIREMENTS / CODE</p> <p>Availability of applicable code (IGC-for ships whose keel was laid on or after 01-06-1986 / GC Code for ships built before 01-06-1986 but after 31-12-1976) or National requirements and Material Safety Data sheets for the carriage of cargoes</p>
<p>CONSTRUCTION DRAWINGS MAINTAINED ON BOARD</p> <p>Confirming that structural alterations performed, if any, have been approved by the classification society and reported on the as-built drawings kept on board (constructed on or after 1st Jan. 2007)</p>
<p>EMERGENCY TOWING PROCEDURES</p> <p>Confirm that ship specific emergency towing procedures available on board.</p>
<p>FOR VESSELS SUBJECT TO IMO PSPC</p> <p>Confirmation that the maintenance, repair and partial recoating of dedicated ballast tanks and double side skin spaces, as appropriate, are recorded in the coating technical file.</p>
<p>CLASS CERTIFICATE</p> <p>Confirmation that the Class annual/Intermediate/renewal* survey completed satisfactorily and Class Certificate endorsed/interim certificate issued* on</p>
<p>WEATHER DECK</p>
<p>GAS DOMES, SUPERSTRUCTURES, DECKHOUSES & WHEELHOUSES</p> <p><i>Verification of sealing arrangements at gas domes, gas tight condition of wheelhouse doors and windows, fixed type side scuttles and windows in superstructure and deckhouse ends facing the cargo area and gas tight bulkhead penetrations.</i></p>
<p>ACCOMMODATION & SERVICE SPACES VENTILATION & AIRLOCKS</p> <p><i>Verification of accommodation, control station / service spaces ventilation system for proper operation and condition of closing devices to air intakes and outlet (to be internally operated in case of carriage of toxic gasses) and airlocks to forward service spaces with access falling in gas dangerous space</i></p>
<p>SPACES NOT NORMALLY ENTERED</p> <p><i>Verification of ventilation arrangements (may be portable ventilation) provided for spaces not normally entered such as hold spaces, interbarrier spaces, void spaces, cofferdams, spaces containing cargo piping and other spaces where cargo vapour could accumulate</i></p>
<p>CARGO & PROCESS PIPING AND FITTINGS</p> <p><i>Verification for condition of cargo, bunker, ballast and vent piping system including vent masts and headers and protective screens along with associated expansion arrangements and for cargo and process piping insulation form hull structure and relief and drainage arrangements. The verification to include condition of removable pipe lengths/other approved equipment necessary for cargo operation. General examination of electrical bonding between hull structure & piping and between pipe & pipe flanges. Examination of liquid & vapour hoses.</i></p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

<p>SPECIAL SPACES</p> <p><i>Verification of closing and other arrangements of any special enclosed space provided for the protection of the crew in the event of a major cargo release including nearby decontamination showers</i></p>
<p>DRIP TRAYS</p> <p><i>Availability of portable or fixed drip trays or insulation of deck plating as protection against cargo leakage</i></p>
<p>FIRE DOORS AND CONTROLS</p> <p><i>Operation of manual/automatic fire doors, no holding back arrangements exist</i></p>
<p>ANCHORING & MOORING EQUIPMENT</p> <p><i>Anchoring equipment & mooring equipment</i></p>
<p>SOUNDING PIPES</p> <p><i>Sounding pipes, including self closing devices on short sounding pipes</i></p>
<p>HATCHWAYS</p> <p><i>Examination and testing of hatchways on freeboard and superstructure decks including efficient condition of closing appliances</i></p>
<p>WEATHER DECKS</p> <p><i>Examination of weather decks, shipside plating above waterline</i></p>
<p>FREEBOARD MARKS</p> <p><i>Verification of freeboard marks</i></p>
<p>VENTILATORS</p> <p><i>Examination and or testing of ventilators including efficiency of their closing appliances</i></p>
<p>SCUPPERS, SANITARY DISCHARGES, VALVES AND CONTROLS</p> <p><i>Examination scuppers and sanitary discharges and valves together with valves and their control gear</i></p>
<p>SKYLIGHTS AND FIDDLEY OPENINGS</p> <p><i>Examination and or testing of skylights and fiddley openings including their closing appliances</i></p>
<p>EXPOSED CASINGS, DECK HOUSES, COMPANION WAYS AND SUPERSTRUCTURES</p> <p><i>Examination and / testing of exposed casings, deck houses, companionways and superstructure bulkheads including closing appliances.</i></p>
<p>EXAMINATION OF CARGO COMPRESSOR ROOM & ELECTRIC MOTORS ROOM</p> <p><i>Examination of electric motor room and compressor room bulkheads for signs of leakage or fractures and in particular the sealing arrangements of all penetrations on bulkheads</i></p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

<p>GUARD RAILS AND/OR BULWARKS</p> <p><i>Examination of the condition and arrangement</i></p>
<p>SEA WATER PIPE EXPANSION JOINTS</p> <p><i>Examining visually the condition of any expansion joints in sea water system</i></p>
<p>WT BULKHEAD OPENINGS</p> <p><i>Watertight bulkheads penetrations examination as far as practicable for satisfactory condition</i></p>
<p>MASTS AND STANDING RIGGING</p> <p><i>Masts, Derricks & Crane columns including their standing rigging</i></p>
<p>COMPANIONWAYS</p> <p><i>Verification of Companionways and posting of appropriate notices.</i></p>
<p>AIR PIPES</p> <p>Examination and or testing of air pipes including efficiency of their closing appliances, weld connection between Air pipes and deck plating.</p> <p>Confirmation that vents from bunker tanks and ballast tanks (with cathodic protection) are equipped with flame screens.</p>
<p>GANGWAYS & LIFELINES</p> <p><i>Examination of the condition and arrangement including portable fittings.</i></p>
<p>FREEING PORTS</p> <p><i>Examination of the condition and arrangement including shutters and crew protection bars</i></p>
<p>GANGWAY AND ACCOMODATION LADDER</p> <p><i>Satisfactory examination of various items pertaining to accommodation ladder, gangways, Davits, Winches. Verification of inspection and maintenance records. (IRS Rules Part 1 Ch.2, Cl.5.2.2.10 to 5.2.2.14)</i></p>
<p>EMERGENCY TOWING ARRANGEMENT</p> <p><i>Verification of ETA for condition and operational readiness (vessel more than 20,000 DWT.)</i></p>
<p>SAFE ACCESS TO BOW</p> <p><i>Verification of arrangements of safe access to bow and the paint applied should be of anti-slip type.</i></p>
<p>TOWING AND MOORING EQUIPMENT</p> <p>Confirming that the towing and mooring equipment is properly marked with any restriction associated with its safe operation for ships constructed after 01/01/2007</p>
<p>BOW OR STERN LOADING/UNLOADING ARRANGEMENTS.</p> <p>Examining when applicable bow or stern loading and unloading arrangements with particular reference to the electrical equipments, fire fighting arrangements and communication</p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

between the cargo control room and shore location.

NEW INSTALLATION OF MATERIALS CONTAINING ASBESTOS

Confirming that new equipment containing asbestos was not fitted on board since last survey.

INTERNAL SPACES

Verification of the permanent means of access where appropriate of the internal spaces as far as practicable. (IRS Rules Part 1 Ch.2, Cl 5.2.2.15)

UPGRADATION / REPAIR TO COATING

Confirmation that maintenance, repair and partial recoating had been done as per manufacturer's specification using acceptable coating system, suitable surface preparation and adequate film thickness under the supervision of coating manufacturer's representative/coating inspector. These had been verified through stage/patrol inspection during survey and considered acceptable.

Note: Ballast tank for which coating condition was upgraded to "GOOD" this time during survey are to be listed in the "Remark" section.

MACHINERY SPACES

MACHINERY AND BOILER SPACES

Machinery, boilers and other pressure vessels, associated piping systems and fittings are so installed and protected as to reduce to a minimum any danger to persons on board, due regard being given to moving parts, hot surfaces and other hazards

FIRE/EXPLOSION HAZARDS

i) Propulsion system and auxiliary machinery, boilers, all pressurized systems (steam, pneumatic, hydraulic) and their associated fittings were examined to see whether they are being properly maintained and with particular attention to the fire and explosion hazards

ii) Verification that oil / water leakages, accumulation of oil, with potential source of ignition does not exist in the machinery spaces. Leakages if any have been dealt and source of leakages rectified.

iii) Confirmation that floor plates & gratings are secured and found to be in order.

STEERING GEAR

All main and auxiliary steering arrangements and their associated equipment and control systems were examined and tested. Steering chains are verified for wear and tear and it was ensured wear is within 12% of the original rule diameter. Confirmation that various alarms required for hydraulic power operated, electric and electro-hydraulic steering gears are, operating satisfactorily and that the recharging arrangements for hydraulic power operated steering gears are being maintained. Log entries made in accordance with statutory requirements were verified where applicable Confirming that various alarms are operating satisfactorily.

MEANS OF COMMUNICATION

All means of communication between the navigating bridge and the machinery control positions including engine room telegraph, as well as the bridge and the main / alternative steering position, if fitted, are tested. Where ships having emergency steering positions there are means of relaying heading information and, when appropriate, supplying visual

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

compass readings to the emergency steering positions. Confirmation that means of indicating the angular position of the rudder are operational.

BOILERS AND PRESSURE VESSELS

Periodical Surveys of boilers and other pressure vessels have been carried out as required by the Rules and the safety devices have been tested. External visual examination. External examination of boilers including test of safety & protective devices and test of safety valve using it's relieving gear. For exhaust gas economisers, review of engine log book to verify that Chief Engineer has tested the safety valves at sea within the window period of Annual Survey

REMOTE CONTROLS

Means for the operation of the main and auxiliary machinery essential for propulsion and the safety of the ship, including when applicable, the means of remotely controlling the propulsion machinery from the navigating bridge and the arrangements to operate the main and other machinery from a machinery control room

BILGE PUMPING ARRANGEMENT

Examination of the bilge pumping systems and bilge wells including operation of each bilge pump (including hand pumps and eductors), extended spindles and level alarms, where fitted. Operational confirmation of emergency bilge suction and bilge-pumping system for each watertight compartment and drainage from enclosed cargo spaces situated on freeboard deck. Examination & random test of water ingress detection alarm system for cargo holds

FIRST START ARRANGEMENT

Operational confirmation of the means provided to bring the machinery into operation from the dead ship condition without external aid

AUTOMATION

General Examination of automation equipment. Operation of safety Devices, bilge level detection and alarm systems and control systems. Operational confirmation of the engineer's alarm that it is clearly audible in the engineer's accommodation

SCHEDULE OF BATTERIES

Schedule of batteries for essential and emergency services available on board and maintenance being done as per this schedule.

NORMAL OPERATION OF PROPULSION MACHINERY

Confirming that the normal operation of the propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes inoperative (IRS Rules Part 1 Ch.2, Cl 5.2.3.4)

MACHINERY SPACE VENTILLATION

Confirmation that machinery space ventilation is in good working condition.

MACHINERY VERIFICATION RUNS

Towards completion of Special/Continuous Survey of Machinery, trial of main & auxiliary machinery including the steering gear & controls carried out to confirm satisfactory operation (In afloat condition).

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

<p>SEA TRIAL</p> <p>In case of major repairs to main propulsion machinery or steering gear, confirmation that a sea trial has been carried out satisfactorily to confirm proper operation of the relevant machinery in all respects.</p>
<p align="center">ELECTRICAL INSTALLATION</p>
<p>ELECTRICAL EQUIPMENT IN GAS DANGEROUS SPACES / ZONES</p> <p><i>Examination of the condition of electrical equipment and cables in gas dangerous spaces and zones</i></p>
<p>INSULATION RESISTANCE</p> <p><i>Verification of insulation resistance of electrical equipment and cables in the gas dangerous spaces and zones (immediate past records may be accepted when the ship is not in a gas free state)</i></p>
<p>ELECTRICAL SYSTEM</p> <p><i>General examination visually and in operation, as feasible, of the main electrical machinery, the emergency sources of electrical power, the switch gear, other electrical equipment including the lighting system. The precautions provided against shock, fire and other hazards of electrical origin for proper maintenance</i></p>
<p>EMERGENCY SOURCE OF POWER</p> <p><i>The operation of the emergency source(s) of electrical power, including their starting arrangement, the systems supplied, and when appropriate, their automatic operation as far as practicable</i></p>
<p align="center">FIREFIGHTING ARRANGEMENTS</p>
<p>WATER SPRAY SYSTEM</p> <p><i>Verification of water spray system including remote starting of pumps and remote operation of any normally closed valves in the system</i></p>
<p>DRY POWDER EXTINGUISHING SYSTEM</p> <p><i>Verification of condition of dry powder extinguishing system including hand hoses, fixed piping, monitors, pressurizing medium, dry chemical powder and local and or remote controls.</i></p>
<p>CARGO COMPRESSOR AND PUMP ROOMS</p> <p><i>Verification of carbon dioxide or any other appropriate fire extinguishing system for cargo compressor and pump rooms</i></p>
<p>MAIN AND EMERGENCY FIRE PUMP</p> <p><i>Verification that each Fire pump (including starting and priming arrangements) is capable of producing the required two jets of water (whilst also permitting the simultaneous operation of foam system on tankers)</i></p>
<p>FIREMAINS, HYDRANTS, HOSES, NOZZLES AND APPLICATORS</p> <p><i>Condition of fire main (no soft patches or doublers) together with flanges and valves,</i></p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

hydrants, hoses, nozzles, applicators, spanners, relief valves and international shore connection

READINESS OF FIRE HYDRANTS, HOSES

Each hose complete with couplings, nozzle (dual-purpose nozzles where applicable) and tools kept ready for use

PORTABLE EXTINGUISHERS AND FOAM APPLICATORS

Confirmation that portable fire extinguishers correspond to the fire control plan w.r.t. number, type and location and that when examined were in good condition, fully charged and ready for use

SPARE CHARGES

Availability of spare charge/s for each portable extinguisher or additional portable extinguishers of the same type

FIRE AND/OR SMOKE DETECTION SYSTEM

Examine for proper functioning and possible testing

FIXED FIRE FIGHTING SYSTEM

i) Examination of fixed fire fighting system controls, piping, instructions and marking. Checking for evidence of proper maintenance and servicing including date of last systems tests

ii) Verification with regard to correct positioning (for in service condition) of safety pins where used on cylinder head discharge valves for fixed fire fighting CO2 system are in accordance with manufacture's instruction manual.

REMOTE STOPPING OF FANS, OIL PUMPS, ETC

Verify that the remote controls for stopping fans and machinery and shutting off fuel supplies in machinery spaces are in working order

CLOSING ARRANGEMENTS FOR SKYLIGHTS, FLAPS ETC

Examination of closing arrangements of ventilators, funnel annular Spaces, skylights, doorways and tunnel where applicable, including Condition of operating mechanism e.g.: wire ropes, hydraulic piping etc.

FIREMAN'S OUTFITS

Verify that Fireman's outfits are complete and in good condition

FIRE DOORS

Examination of any manual and automatic fire doors and proving their operations

MEANS OF ESCAPE

Confirmation that the means of escape from accommodation, machinery and other spaces are satisfactory

DRY CHEMICAL POWDER FIRE EXTINGUISHING SYSTEM

Examining the dry chemical powder fire extinguishing system for the cargo area and confirming that its

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

means of operation is clearly marked.

GASEOUS FUEL FOR DOMESTIC PURPOSE

Arrangements found in satisfactory condition

INERT GAS / DRY AIR SYSTEM

ENVIRONMENTAL CONTROL

Verification of arrangements for safe purging of cargo tanks, and arrangements for environmental control within interbarrier and hold spaces in case of tanks other than type C independent tanks or within surrounding spaces of type C independent tanks including monitoring arrangements comprising gas sampling points, pressure relief valves and pressure monitoring Automation and alarm system

INERT GAS GENERATION SYSTEM

Verification of functional readiness of inert gas generation system, together with alarms and controls including arrangements to prevent cargo vapours entering machinery space or other spaces outside cargo tank area, when the inert gas generator is fitted in these spaces.

DRY AIR SYSTEM

Verification of dry air system together with the vapour detection system for the spaces being controlled and rapid inerting arrangement

INERT GAS USAGE

Confirming that use of inert gas has not increased beyond that needed to compensate for normal losses by examining records of inert gas usage. (IRS Rules Part 1 Ch.2, Cl 5.2.5.18)

SAFETY ARRANGEMENTS RELATED TO CARGO/CARGO AREA

Confirming that when applicable arrangements are made for sufficient inert gas to be carried to compensate for normal losses and that means are provided for monitoring the spaces. (IRS Rules Part 1 Ch.2, Cl 5.2.5.17)

CARGO HANDLING / CARGO CONTROL ROOMS

CARGO TANK GAUGING SYSTEM & EMERGENCY SHUTDOWN SYSTEM

Verification of cargo tank liquid level gauges, high level alarms and automatic high-liquid-level shut-off system including manually operated emergency shut-down (ESD) system together with automatic shutdown of cargo pumps and compressors (ESD need not be tested during cargo transfer).

CARGO TANK & INTERBARRIER SPACES

Verification of cargo tank and interbarrier space pressure and vacuum relief valves including associated gauging, safety system and alarms

GAS DETECTION EQUIPMENT

Verification of test and calibration status of cargo gas leak detection equipment using span gas and test of alarm (30% LEL alarm to be tested with span gas)

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

<p>CARGO CONTAINMENT SYSTEM</p> <p><i>Verification of cargo containment system & associated equipment together with any associated shut down and or interlock temperature indicating equipment and associated alarms. Verification of records of cold spot examination at the surrounding structures of wing tank, double bottom tank & cofferdam.</i></p>
<p>CARGO AND PROCESS PIPE LINE</p> <p><i>Cargo pipelines, valves and fittings specially expansion bellows, supports & vapour seals on installed pipes to examine.</i></p>
<p>HOSES</p> <p><i>Liquid and vapour hoses should be suitable for their intended purpose.</i></p>
<p align="center">CARGO PUMP AND COMPRESSOR ROOMS AND ENVIRONMENT CONTROL</p>
<p>ENVIRONMENT CONTROL</p> <p><i>Examination of the arrangement for cargo pressure / temperature control, including where fitted, any reliquefaction / refrigeration system / boil off arrangement and confirmation of associated alarms.</i></p>
<p>ELECTRICAL MOTOR ROOMS VENTILATION AND AIR LOCKS</p> <p><i>Examination of the ventilation arrangement and air locks including alarms and loss of over pressure protection</i></p>
<p>PROTECTION OF CARGO PUMP ROOMS</p> <p><i>Examining all pump room bulkheads for signs of oil leakage or fractures and, in particular, the sealing arrangements of all penetrations of cargo pump room bulkheads. Confirming that potential sources of ignition in or near the cargo pump room are eliminated, such as loose gear, combustible materials, etc., that there are no signs of undue leakage and that access ladders are in good condition. Verifying that installed pressure gauges on cargo discharge lines and level indicator systems are operational.</i></p>
<p>CARGO PUMP ROOM VENTILATION, CLEANLINESS Etc</p> <p><i>Examination of cargo pump room(s) spaces for freeness from potential sources of ignition, access ladders and cargo pump room drainage arrangements; operation of the ventilation system (damper operation and flame screens) including interlocking arrangement to lighting</i></p> <p><i>Verification that no oil leakages and no accumulation of oil in the cargo pump room. Leakages if any have been dealt and source of leakages rectified.</i></p>
<p align="center">PROTECTION OF PERSONNEL</p>
<p>PROTECTIVE EQUIPMENT</p> <p><i>Verification of availability and condition of protective equipment including eye protection for crew engaged in cargo operations and their storage arrangement.</i></p>
<p>RESPIRATORY & EYE PROTECTION EQUIPMENT</p> <p><i>Availability and condition of respiratory and eye protection equipment suitable for emergency escape for every person on board, where the ship is designated to carry certain products</i></p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

<p>DECONTAMINATION AND EYE WASH ARRANGEMENT</p> <p><i>Functional verification of decontamination and eye wash arrangements including arrangements against freezing, where the ship is designated to carry certain products</i></p>
<p>FIRST-AID EQUIPMENT</p> <p><i>Availability and condition of first aid equipment including stretchers, oxygen resuscitation equipment and antidotes for cargoes carried on board</i></p>
<p>SAFETY EQUIPMENT</p> <p><i>Verification of safety equipment comprising breathing apparatus together with requisite air supplies and its storage arrangement (at least two complete sets in addition to the fire fighting requirements and additional two more complete sets where the ship's cargo carrying capacity is 2000 m3 and over and is designated to carry certain products).</i></p>
<p>ADDITIONAL CLASS NOTATIONS</p>
<p>ADDITIONAL CLASS NOTATIONS E.G. SPM, VCS etc.</p>
<p>‘SPM’ NOTATION</p> <p><i>Components of the single point mooring system (bow chain stoppers, bow fairleads, winches and capstans), to verify their satisfactory condition, Hull structures supporting and adjacent to the components to the single point mooring system, to verify that there is no deformation or fracture.</i></p>
<p>“HY (LGC)” NOTATION</p> <p><i>Machinery under working condition, to verify the shells of all pressure vessels in the system externally including condition of insulation. Primary refrigerant gas and liquid pipes, cargo vapour and liquid condensate pipes and condenser cooling water pipes, The reliquefaction/refrigerent plant spare gear.</i></p>
<p>METHANE BURNING EQUIPMENT IF FITTED</p>
<p><i>Following components are to be generally examined externally: -</i></p> <p><i>Heat exchangers and pressure vessels for use with methane burning in boilers and machinery, Cargo heaters, vaporizers, masthead heaters and other miscellaneous pressure vessels. Controls and interlock are to be checked, Alarm systems are to be checked, Exhaust fans and/or pressurizing system for gas trunking are to be tested, The relevant instruction and information material such as cargo handling plans, filling limit information, cooling down procedures etc are to be verified as being on board.</i></p>
<p>GENERAL</p>
<p>HOUSE KEEPING</p> <p><i>i)Verification that general housekeeping / cleanliness in engine room, pump room, on deck, accommodation, hospital, galley, wash basins and toilets are satisfactory.</i></p> <p><i>ii)Confirmation that no loose drums and no heavy items without securing/lashing on deck.</i></p>

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.

iii)Confirmation that Spare anchor where provided, its lashing bracket in good condition.

FLAG SPECIFIC REQUIREMENTS

Confirmation that flag specific requirements/instructions, if any are complied with.

Please Provide details in Remark section.

H.O. INSTRUCTIONS

Confirmation that H.O. Instructions pertaining to this survey if any communicated separately, have been compiled with.

Please Provide details in Remark section.

GUIDANCE NOTES

1. **APPROVED TRIM & STABILITY INFORMATION:** - SOLAS 88 Amend / II-1 / Reg. 22.
2. **FIRE CONTROL PLANS:** - SOLAS Ch. II-2, Reg. 15, part E, Cl. 2.4
3. **STEERING GEAR ENTRIES REQUIRED BY SOLAS:** - SOLAS 99/00 Amend / V / Reg. 26
4. **DAMAGE STABILITY:** - SOLAS Ch. II Part B-1 reg 25.1
5. **Manoeuvring Booklet:** - SOLAS 81 Amend / II-1 / Reg. 28
6. **Construction drawings maintained on board:** - SOLAS 05 Amend / II-1 / Reg. 3-7
7. **Towing and mooring equipment :** - SOLAS 05 Amend / II-1 / Reg. 3-8
8. **NEW INSTALLATION OF MATERIALS CONTAINING ASBESTOS:-** SOLAS 05 Amend / II-1 / Reg. 3-5

Condition to be reported using number code as follows:

1. When examined found to be satisfactory and/or examined/tested satisfactory and/or confirmed arrangements exist in satisfactory condition. No repairs considered necessary this time.
2. Repairs now recommended and were carried out satisfactorily. After repairs found to be satisfactory and/or examined / tested satisfactorily and/or confirmed arrangements exist in satisfactory condition.
3. Repairs now recommended and remain outstanding.
4. Opportunity to examine/test was not provided this time. Remains outstanding.