# CLASS ANNUAL SURVEY/ INTERMEDIATE SURVEY/ SPECIAL SURVEY/ GENERAL EXAMINATION\* CHECKLIST FOR LIVESTOCK CARRIERS

Ship Name: Report No.: I.R. No.:

## **DOCUMENTATION**

#### APPROVED TRIM & STABILITY INFORMATION

Confirmation of availability of trim and stability booklet approved by administration.

## **CARGO SECURING MANUAL**

Confirmation of availability of approved cargo securing manual.

(Applicable in combination carrier where other type of cargo is also carried along with livestock)

#### STATUTORY CERTIFICATES

Valid Statutory certificates available on board.

#### FIRE CONTROL PLANS

Verification of proper posting of fire control plans (including duplicate sets permanently stored in a prominently marked weather tight enclosure outside deckhouse)

#### LOADING MANUAL

Verified that vessel has an approved Loading Manual.

## STEERING GEAR ENTRIES REQUIRED BY SOLAS/FLAG

Verification of entries made in the ship's log for departure steering checks & Emergency Steering drills.

#### DAMAGE CONTROL PLANS & BOOKLET

Verification that damage control plans & booklet are available.

(Note: Applicable to Dry cargo ships of 500GT and over keel laid on or after 01/02/1992 and All cargo ship of 500GT and over keel laid on or after 01/01/2009)

#### DAMAGE STABILITY

Availability of damage stability information

(Note: cargo ships having load line length of 80 m and above)

# **HULL AND MACHINERY SURVEYS**

Verification that no CSH/CSM items are overdue.

# MANOEUVRING BOOKLET

Confirming that the manoeuvring booklet is on board and that the manoeuvring information is displayed on the navigating bridge

#### CONSTRUCTION DRAWINGS MAINTAINED ON BOARD

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)

# **EMERGENCY TOWING PROCEDURES**

Confirm that ship specific emergency towing procedures available on board.

## **COATING TECHNICAL FILE**

Confirmation that Coating Technical File is available on board and maintained.

Confirmation that the maintenance, repair and partial recoating of dedicated ballast tanks, are recorded in the coating technical file and the maintenance of the protective coating is included in the overall ship's maintenance scheme.

(Note: Applicable for ships of not less than 500 gross tonnage with dedicated seawater ballast tanks for which the building contract is placed on or after 01/07/2008 or the keels of which are laid on or after 01/01/2009 or which are delivered on or after 01/07/2012.)

## SHIP CONSTRUCTION FILE (SCF)

Confirmation that ship construction file (SCF) is available and maintained onboard.

#### HARMONIC DISTORTION RECORD FOR VESSEL FITTED WITH HARMONIC FILTER.

Verification of annual measurement record of harmonic distortion level at bus bar (Applicable for vessel keel laid before 1 July 2017 and for any modification on electrical distribution system on existing vessel, total distortion measured along with equipment running at the time of measurement to be recorded.)

## OPERATIONAL MANUAL FOR EFFECT OF HARMONIC FILTER

## 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.
- 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.

Verification that following document are available on board.

- 1) Effect of failure on harmonic filter on electrical distribution system.
- 2) Permitted modes of operation for maintaining harmonic distortion level within acceptable limit during normal operation and during failure of filter.
- 3) Approved copy of relaxation on allowable distortion limit, if any
- 4) Record of harmonic distortion level measured.

(Note: Applicable for vessel keel laid on or after 01 July 2017 and on exiting ship retrofitted with harmonic filter on or after 01 July 2017.)

## ALTERNATIVE DESIGN & ARRANGEMENT

Confirm that, where applicable the approved documentation for the alternative design and arrangement is in board.

#### WEATHER DECK

## MASTS AND STANDING RIGGING

Masts, Derricks & Crane columns including their standing rigging

## FIRE DOORS AND CONTROLS

- a. Examination of manual/automatic fire doors, verification of their satisfactory operation and confirmation that no holding back arrangements exist and arrangements for self-closing & locking are in order.
- b. Confirmation that fire doors provided between machinery space and steering gear compartment are of gastight, self-closing type and without any hold back arrangements.

(Note: applicable where emergency fire pump is in steering gear compartment)

## **ANCHORING & MOORING EQUIPMENT**

Examining the anchoring equipment & mooring equipment. At renewal survey, during the examination, anchors are lowered and raised using the windlass.

## **SOUNDING PIPES**

Sounding pipes, including self closing devices on short sounding pipes

#### **HATCHWAYS**

Examination and testing of hatchways on freeboard and superstructure decks including efficient condition of closing appliances.

#### WEATHER DECKS

Examination of weather decks, ships side plating above water line.

## **HULL MARKINGS**

Verification that hull markings such as freeboard markings, draft markings, vessel name, IMO number, port of registry are legible and in satisfactory condition.

## **VENTILATORS**

Examination and or testing of ventilators including efficiency of their closing appliances

# WINDOWS, SIDE SCUTTLES AND DEAD LIGHTS

Examination and or testing of windows, side scuttles and dead lights

# SCUPPERS, SANITARY DISCHARGES, VALVES AND CONTROLS

Examination scuppers and sanitary discharges and valves together with valves and their control gear

## SKYLIGHTS AND FIDDLEY OPENINGS

Examination and or testing of skylights and fiddley openings including their closing appliances

#### EXPOSED CASINGS, DECK HOUSES, COMPANION WAYS AND SUPERSTRUCTURES

Examination and / testing of exposed casings, deck houses, companionways and superstructure bulkheads including closing appliances

# GUARD RAILS AND/OR BULWARKS

Examination of arrangement of guardrails, bulwarks for satisfactory condition.

## COLLISION &WATERTIGHT BULKHEAD OPENINGS

Examining the collision and the other watertight bulkheads as far as can be seen. Watertight bulkheads penetrations examination as far as practicable for satisfactory condition, watertight doors in watertight bulkheads

## TOWING AND MOORING EQUIPMENT

Confirming that the towing and mooring equipment is properly marked with any restriction associated with its safe operation. (Note: Applicable for vessels constructed on or after 1st Jan. 2007)

## HATCH COVERS AND COAMINGS

#### Condition to be reported using number code as follows:

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- 3. Repairs now recommended and remain outstanding.
- 4. Opportunity to examine/test was not provided this time. Remains outstanding.

Hatch covers and coamings including their closing appliances, stowage, fit & operation

## **AIR PIPES**

Examination and or testing of air pipes including efficiency of their closing appliances, weld connection between Air pipes and deck plating.

Confirmation that vents from bunker tanks and ballast tanks (with cathodic protection) are equipped with flame screens and mesh provided are in satisfactory condition.

#### FREEING PORTS

Examination of the condition and arrangement including shutters and crew protection bars

# NEW INSTALLATION OF MATERIALS CONTAINING ASBESTOS

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

## STRUCTURAL FIRE PROTECTION

Confirming, as far as practicable, that no changes have been made in the structural fire protection, examining any manual and automatic fire doors and proving their operation, testing the means of closing the main inlets and outlets of all ventilation systems and testing the means of stopping power ventilation systems from outside the space served.

# GANGWAY, LIFELINES AND MEANS OF EMARKATION/DISEMARKATION

a. Satisfactory examination of items pertaining to lifelines, accommodation ladder, gangways, Davits, Winches. Verification of inspection and maintenance records.

b. Confirmation that embarkation ladder and accommodation ladder including safety net are in satisfactory condition and marked with safe working load.

# INTERNAL SPACES

Verification of the permanent means of access where appropriate of the internal spaces as far as practicable.

#### 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.)

# LIVESTOCK PENS, PASSAGEWAYS AND ARRANGMENTS

#### ARRANGEMENTS OF LIVESTOCK SPACE

Confirming that arrangements of livestock space for carriage of livestock including fittings, fitments, protection for livestock and means of access/escape for livestock are in satisfactory condition and no unauthorized alteration has been done. (Note: This also includes accessways, ramps between decks and vessel/shore livestock accesses)

Confirming that arrangements are maintained in such a way that it protects the livestock from injury, avoidable suffering and exposure to weather, sea or hot parts.

Examining the insulation of livestock spaces for satisfactory condition where applicable.

(Note: Applicable where casing, tank top or bulkhead of engine room/boiler room or heated fuel tank forms a boundary with livestock spaces)

## ARRANGEMENTS IN PEN AREAS

Confirming that pens, stalls for cattle and of adjacent passageways arrangements are maintained and in satisfactory condition.

Confirming that condition of pen floor or stall floor provides non slippery foothold surface for cattle.

Confirming that railings in the pen areas are in satisfactory condition.

Examining the means of access for persons to pens, stalls and confirming that the means of egress are clearly marked.

#### **RAMPS AND BATTENS**

Examination of ramps including its stowage and securing arrangement for satisfactory condition and confirming that ramps are clearly marked with loading capacity.

Confirming the satisfactory condition of protective fencing and railings used between livestock ramp and the access for person to livestock spaces where applicable.

Examining the battens in the cargo spaces of livestock carriers for satisfactory condition.

# FODDER AND DRINKING WATER SUPPLY SYSTEM

# ARRANGEMENT AND TESTING OF SYSTEM

Confirming that arrangements for fodder and drinking water supply, fresh water supply system of livestock spaces are in

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- 3. Repairs now recommended and remain outstanding.
- 4. Opportunity to examine/test was not provided this time. Remains outstanding.

good condition.

Confirming that the equipment, including pumps, used for drinking water to livestock are maintained in proper working order and water stowage tanks are maintained so as to avoid any water contamination.

Performance testing of fodder system, drinking water supply system.

# PROTECTION OF FODDER AND WATER ARRNAGEMNT

Confirming that the screening of fodder and watering arrangements for pens and stalls situated on unenclosed decks is maintained for protection from sea spray and weather.

# WATER WASHING SYSTEM

Confirming that water washing system and connections to wash the livestock spaces are in satisfactory condition.

## SEWAGE DRAINGAE AND DISCHARGE SYSTEM

Examining the sewage drainage and discharge arrangement for livestock spaces including drainage gutters, drainage pipelines, pumps and ejectors are in satisfactory condition.

#### MACHINERY SPACES

## MACHINERY AND BOILER SPACES

Confirming that the machinery, boilers and other pressure vessels, associated piping systems and fittings are so installed and protected so 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

- a. 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.
- b. Confirmation that lagging material on hot surfaces, anti-splash tapes on joints are in place as required and high-pressure fuel lines are jacketed and spray shields flanged/screwed joints of pipes are in satisfactory condition.
- c. Confirmation that arrangement for high pressure fuel oil leak off alarm for propulsion engine, auxiliary engines or any other diesel engines are satisfactory and operational. Drain lines are connected to alarm unit and working satisfactory.
- d. Where flexible hoses/pipes are used, examination of hoses/pipes for any signs of material cracking or deterioration to ensure that, there is no damage, cut, kinked, crushed, twisted, hardened, cracked hoses/pipes exists in the oil systems.
- e. Confirmation that the supports and retaining devices of low-pressure fuel system provides adequate restraint and are in satisfactory condition.

#### STEERING GEAR

- a. 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
- b. Confirmation that steering gear compartment is in satisfactory condition and provided with handrail arrangements, grating or non-slip surface.

## 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 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 its 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

Examining the 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

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- 3. Repairs now recommended and remain outstanding.
- 4. Opportunity to examine/test was not provided this time. Remains outstanding.

(including the control, monitoring, reporting, alert and safety actions) 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.

## 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.

## FIRST START ARRANGEMENT

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

# SEA WATER PIPE EXPANSION JOINTS

Examining visually the condition of any expansion joints in sea water system.

## **AUTOMATION**

General Examination of automation equipment. Operation of safety devices, bilge level detection and alarm systems and control systems. Examination and testing of the general emergency alarm system and 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.

## MACHINERY SPACE VENTILLATION

Confirmation that machinery space ventilation is in good working condition.

## VENTILLATION OF SPACE FOR SECONDARY SOURCE OF POWER

Confirmation that ventilation is in good working condition. Ventilation louvers and its closing appliance for the space examined/ tested and found satisfactory.

## EMERGENCY GENERATOR ROOM VENTILATORS ARRANGEMENT

Verification that following requirement of emergency generator room ventilation louvers and its closing appliance examined/ tested and found satisfactory.

- a) Manual or power operation of louvers and its closing appliance.
- b) Operating instruction, where hand -operated system is in use
- c) Automatic opening of ventilation louvers whenever emergency generator starting/ in operation for power operated system where provided including fail to open operation.
- d) Manual closing operation from outside the space, where open /closed indication clearly marked.

(Note: Applicable for vessel keel laid on or after 01 January 2017)

## **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).

For Controllable Pitch Propeller, confirmation that pitch position indicators are working satisfactorily from remote and emergency position, onboard record of hydraulic oil analysis is available and servo oil low pressure and high temperature alarms are operational and oil level in the tank is maintained.

## SEA TRIAL

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.

(Note: In case of major repairs to main propulsion machinery or steering gear, the scope of sea trial is to also include a test plan for astern response characteristics based on those required for such an equipment or system when fitted to the new ship. The tests are to be carried out at least over the manoeuvring range of the propulsion system and from all control positions. A test plan is to be provided by the manufacturer and accepted by the surveyor. If specific operational characteristics have been defined by the manufacturer, same is to be included in the test plan and the reversing characteristics of the propulsion plant, including the blade pitch control system of controllable pitch propellers, are to be demonstrated and recorded during trials.)

# VENTILATION ARRANGEMENT IN LIVESTOCK SPACE

Confirming that ventilation arrangement in livestock space is in good working condition.

Confirming that the operation of fans including fan starters, failure indicators and alarms at different positions is in normal

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- 3. Repairs now recommended and remain outstanding.
- 4. Opportunity to examine/test was not provided this time. Remains outstanding.

condition.

(Note: Where only one fan is provided, it is to be confirmed that adequate spare parts are available onboard.)

## ELECTRICAL INSTALLATION

#### **ELECTRICAL SYSTEM**

- a. General examination visually and in operation, as feasible, of the main electrical machinery, the secondary source of power, the emergency sources of electrical power, the switch gear, other electrical equipment for satisfactory condition. The precautions provided against shock, fire and other hazards of electrical origin for proper maintenance.
- b. Confirmation that light covers including emergency lights are in satisfactory condition.
- c. Confirmation that 440 V/220 V panels are not showing low insulation resistance.
- d. Confirmation that insulation mat is provided around the electrical switch board, panels.

## **EMERGENCY SOURCE OF POWER**

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

## SECONDARY SOURCE OF POWER

The operation of the secondary source(s) of electrical power, including their starting arrangement, the systems supplied, and when appropriate, their automatic operation as far as practicable. Verifying that instructions for changeover between main and secondary source of power and vice-versa are available and confirming satisfactory functioning of same.

## MONITORING OF HARMONIC DISTORTATION

Confirmation that equipment for continuous monitoring of harmonic distortion level is in good order, alarm tested, logging of measured value verified in engine log book or electronically in case where automation system fitted and found to satisfactory. (Note: Applicable for vessel keel laid on or after 01 July 2017 and on exiting ship retrofitted with harmonic filter on or after 01 July 2017.)

## PROTECTION ARRANGEMENT FOR HARMONIC FILTER

Confirmation that protection for harmonic filter, including alarm tested and found satisfactory.

(Note: Applicable for vessel keel laid on or after 01 July 2017 and on exiting ship retrofitted with harmonic filter on or after 01 July 2017.)

## LIGHTING IN LIVESTOCK SPACES

Examining the lighting system and lamp casing on light fittings for the livestock space and confirming that adequate lighting is available in livestock spaces.

# ADDITIONAL REQUIREMNETS FOR IMPRESSED CURRENT CATHODIC PROTECTION (ICCP) SYSTEMS

#### DOCUMENTATION AND RECORDS

- 1. Confirmation that ICCP Manual is available onboard and attachments details of anodes and reference electrodes along with specification of connecting cables are available for reference.
- 2. Confirmation that record of system operation is maintained and downtime if any is recorded. Confirmation that all anode current outputs and potentials monitored are similar to those settled during previous assessment.
- 3. Confirmation from records that ICCP system is maintained and adjusted by the supplier on regular basis as per manufacturer's instructions.

#### SYSTEM OPERATION

Confirmation that system is in operation and working satisfactory. Confirmation that operation of indicators and control on the panel including auto/manual switch are found to be satisfactory.

# PROTECTION ARRANGEMENT FOR ANODE CABLES

Confirmation that protection arrangement for ICCP anode cables is in satisfactory condition.

#### ALTERNATIVE DESIGN AND ARRANGEMENT

Where applicable, examination of alternative design and arrangement for machinery or electrical installations, low-flashpoint fuel storage and distribution systems, or fire safety, in accordance with the test inspection and maintenance requirements if any specified in the approved documentation is to be carried out

# FIREFIGHTING ARRANGEMENTS

# SERVICING OF FIREFIGHTING APPLIANCES

Verification of evidences for proper maintenance and servicing of firefighting appliances.

| No. | Item                | Inspection Type (Examination / Testing) | <b>Date Last Done</b> | <b>Due Date</b> |
|-----|---------------------|---|-----------------------|-----------------|
| 1   | Breathing apparatus |   |                       |                 |

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- 3. Repairs now recommended and remain outstanding.
- 4. Opportunity to examine/test was not provided this time. Remains outstanding.

| 2 | Portable/ Semi-portable Fire Extinguishers |  |  |
|---|--|--|--|
| 3 | Fixed Fire Extinguishing system            |  |  |
| 4 | Fireman's outfit                           |  |  |
| 5 | International Shore Coupling               |  |  |

## MAIN AND EMERGENCY FIRE PUMP

- a. Verification that each main fire pump (including starting and priming arrangements) is capable of producing the required two jets of water produced simultaneous from different hydrants at any part of the ship including spaces intended for the livestock whilst the required pressure is maintained in the fire main.
- b. Confirmation that emergency fire pump including prime mover and priming arrangements, gauges are in satisfactory condition and pump is building required water pressure and two jets of water simultaneously.

Tested pressure :.....bar

# FIREMAINS, HYDRANTS, HOSES, NOZZLES AND APPLICATORS

Condition of fire main together with flanges and valves, hydrants, hoses, nozzles, applicators, spanners, relief valves and international shore connection.

Confirming that all fire hydrant and fire hose connections in the pen area and livestock spaces are in satisfactory condition,

#### READINESS OF FIRE HYDRANTS, HOSES

Each hose is 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.

(Note: Portable fire extinguisher at the entrance of space where hay or straw is carried or used in a livestock space is to be specifically examined for satisfactory condition as applicable).

#### **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

- a. Examie for proper functioning and possible testing of fire detection and alarm system and sample extraction smoke detection system;
- b. Confirmation that maintenance as recommended by manufacturer has been undertaken and spares available as per manufacturer's instructions for the system.

## REMOTE STOPPING OF FANS, OIL PUMPS, VALVES, ETC

- a. Verify that the remote controls for stopping fans and machinery are in working order. Examination of the arrangements for oil fuel, lubricating oil and other flammable oils and testing the remote closing of valves for oil fuel, lubricating oil and other flammable oils and, the operation of the remote means of closing the valves on the tanks that contain oil fuel, lubricating oil and other flammable oils.
- b. Confirmation that quick closing valves are in satisfactory condition and no valve is isolated/disconnected and operating instructions are displayed.

# FIREMAN'S OUTFITS & EEBDS

Confirmation that the fire fighters' outfits including its self-contained compressed air breathing apparatus and emergency escape breathing devices (EEBDs) are complete and in good condition and that the cylinders, including the spare cylinders, of any required self-contained breathing apparatus are suitably charged, and that on board means of recharging breathing apparatus cylinders used during drills or a suitable number of spare cylinders to replace those used are provided, and provision of two-way portable radiotelephone apparatus of an explosion-proof type or intrinsically safe

# FIXED FIRE FIGHTING SYSTEM

- i) Examination of fixed firefighting 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.
- iii) Examination of the fixed carbon dioxide extinguishing systems, where applicable, are provided with two separate controls, one for opening of the gas piping and one for discharging the gas from the storage container, each of them located in a release box clearly identified for the particular space.

## ADDITIONAL FIREFIGHTING ARRANGEMENTS IN LIVESTOCK SPACES

Examination of fixed water firefighting system for satisfactory condition.

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- 3. Repairs now recommended and remain outstanding.
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Confirming, where applicable, that appropriate warnings are put in placed and no naked lights are used.

(Note: Applicable where a hay or straw is carried or used in livestock space).

## FIREFIGHTING ARRANGEMENT FOR SPACE HOUSING SECONDARY SOURCE OF POWER

Examination firefighting arrangement for space housing secondary source of power is in satisfactory condition.

#### 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.

## MEANS OF ESCAPE

- a. Confirmation that the means of escape from accommodation, machinery and other spaces are satisfactory.
- b. Confirmation that opening of escape doors are in the way of direction of escape, handrails are provided in the corridors that are being used as escape routes and none of the doors along any designated escape routes require keys to unlock them when moving in the direction of escape.

## GASEOUS FUEL FOR DOMESTIC PURPOSE

Examining the arrangements for gaseous fuel for domestic purposes.

#### **GENERAL**

#### HOUSE KEEPING

- i) Verification that general housekeeping / cleanliness in engine room, on deck, accommodation, hospital, galley, wash basins and toilets are satisfactory.
- ii) Confirmation that no loose drums and no heavy items without securing/lashing on deck.
- 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.

# ADDITIONAL REQUIREMENTS TOWARDS CLASS INTERMEDIATE SURVEY

#### PIPING SYSTEM

(This section is applicable where the intermediate survey is equivalent to the previous special survey)

Examination of all bilge and ballast piping systems incl. operational testing to working pressure to confirm that the tightness and condition are satisfactory. Above to include all piping in the ballast tanks, pipe tunnels, cofferdams and void spaces as applicable including plating and framing, bilge and drain wells soundings, venting, pumping and drainage arrangements.

# **EXAMINATION OF TANKS, SPACES & THICKNESS MEASUREMENT**

Confirmation that examination of tanks, spaces including testing and thickness measurements are carried out satisfactorily as per the rule requirements and reported separately.

# ADDITIONAL REQUIREMENTS TOWARDS SPECIAL SURVEYS

# MOORING ROPES AND TOW LINES

Confirmation that sufficient mooring ropes and tow lines as required by rules are provided onboard.

## AIR PIPES

For vessels other than passenger vessels, internal examination of automatic air pipe heads at special survey as required by IRS Rules, to confirm these are maintained in satisfactory condition.

## **CHAIN LOCKER**

Examination of chain locker, hold fast, hawse pipes and chain stoppers and pumping arrangement of the chain locker.

## MEANS OF EMBARKATION AND DISEMBARKATION

Confirmation that accommodation ladders, gangways and its winches incl. brake system operationally tested with specified maximum operation load in accordance with Rules and found to be satisfactory.

## **PUMPING SYSTEM**

Examination of all freshwater pumps, sewage pumps and system components for livestock in open condition to confirm these are in satisfactory 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.
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- 3. Repairs now recommended and remain outstanding.
- 4. Opportunity to examine/test was not provided this time. Remains outstanding.

## PIPING SYSTEM

Examination of all bilge and ballast piping systems incl. operational testing to working pressure to confirm that the tightness and condition are satisfactory. Above to include all piping in the ballast tanks, pipe tunnels, cofferdams and void spaces as applicable including plating and framing, bilge and drain wells soundings, venting, pumping and drainage arrangements.

# EXAMINATION OF TANKS, SPACES AND THICKNESS MEASUREMENT

Confirmation that internal examination of tanks, spaces including testing and thickness measurements are carried out satisfactorily as per the rule requirements and reported separately.

## FOODER AND FRESH WATER SUPPLY SYSTEM

Examining internally the fodder tanks and the freshwater tanks of livestock spaces for satisfactory condition (Please provide details of tanks in the remark section)

# VENTILATION ARRANGEMENT IN LIVESTOCK SPACE

General inspection of ventilation fan and motor in the livestock spaces together with its control and operational mechanism for satisfactory condition including operational testing if required.

Testing of interlocking devices of fan starters in the livestock space for satisfactory operation.

# **CLASS CERTIFICATE**

Confirmation that the survey/general examination\* completed satisfactorily and Certificate extended/ Full-Term certificate issued/ Full-Term Certificate issued/ Full-Term certificate issued\*

#### 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.