

CHAPTER 2

SPECIFIC DUTIES OF MASTER AND OFFICERS

Separate sections of these Regulations and Instructions detail certain of the specific duties and responsibilities of various Officers. The object of these sections is to demarcate, as far as can be done, the special duties of the rank, for mutual guidance and assistance, but these are not to be regarded as exhaustive, each officer being excepted at all times and in all ways to do his best to promote and protect the interests of the Company, and to use his reasonable discretion therein.

DECK DEPARTMENT

2.1 MASTER

2.1.1 General Responsibility

The Master is solely responsible to the Company for the efficient running and safety of the vessel under his command.

The Master has an over-riding responsibility to satisfy himself that all the Company's general instructions, as well as those specifically attributed to other Officer's, are being properly carried out.

2.1.2 Stability and safety

The Master must ensure that his vessel is at all times loaded to his satisfaction and that she will arrive at her final destination with a safe GM, having regard to consumption of fuel and fresh water during her voyage

2.1.3 Navigation

As well as having the general instructions under his heading at his own fingertips, the Master must take special care to ensure that all his Deck Officers are thoroughly conversant with them.

2.1.4 Casualties

It is the Master's personal and direct responsibility that all "Casualties" procedures laid down in the Navigation Section is fully carried out.

In addition to the procedure laid down for reports on serious accidents, a report must be made to the Company at the end of each voyage, in the event of any minor accident, defect in machinery or navigation gear, fouling of propeller or rudder, in order that immediate attention may be given.

2.1.5 Absence from ship

Except under exceptional circumstances, Masters must not absent from their ship.

2.1.6 Pilotage

Masters are expected to do their own pilotage at ports where it is not compulsory to take a pilot, after a reasonable numbers of calls, depending on the difficulties and intricacy of the pilotage ground and entrance.

Even when a pilot is on board, the Master remains fully responsible for his vessel and is not absolved from blame for any incident merely because it occurs while the ship is in the hands of a pilot. In case of any doubt about a pilot's efficiency, the Master must immediately take over the handling of the vessel, without waiting until it is too late to avoid an accident.

When pilotage is not compulsory but a pilote is required, a request for a pilot with vessel's estimated time of arrival (ETA) at the pilot station should be notified to Agent's by wireless at least 24 hours in advance. In any case vessel's ETA must be notified to Agents in accordance with the terms of the Charter Party and may sometime amount to as much as 48 hours or even 72 hours.

2.1.7 Discipline

The Master is responsible for the discipline of all Officers and crew under his command. Any case of drunkenness or other misconduct, whether on or off duty, must be recorded in the Official Log, **and reported to the Company**, whether or not it is intended to prosecute.

2.1.8 Crew

Crew are **normally** engaged only through the Company and should not be engaged or discharged without prior consultation with the former except in case of emergency, a subsequent report being made to the Company in such cases.

2.1.9 Crew and articles

When Articles of Agreement are opened or seamen engaged or discharged, the Master must personally attend at the Shipping Office. Shipping Offices fees are paid by Agents and the Master must sign the Shipping Office voucher and certify the correct numbers signed on or off.

All Articles of Agreement must contain the clauses shown on the Company's official printed form.

If any member of the crew absents himself from duty without leave, the time of such absence is to be entered in the Official Log Book and his wages stopped for that period. Such deductions are to be paid into the Shipping Office when presenting the Log for stamping.

The Master will pay each member of the crew separately before two witnesses, an Officer and the head of the department concerned, in accordance with the Merchant Shipping Act. Failure to comply with this procedure will render the Master responsible for all sums in dispute. Each member of the crew must personally receive and sign for his own pay. At the request of a member of the crew, his pay may be paid to a bank of his choice.

2.1.10 Seamen's unions

The Master should not deal directly with any official of any Union. If approached, and in the case of any dispute, the official should be referred to the Company which must be notified of the circumstances of the dispute.

2.1.11 Agents

Instructions to Masters when in ports will normally be given, or sent by the Company through the Agents at that port, and Masters should similarly apply to them for instructions and advice as necessary. In special circumstances only should the Master at his discretion apply direct for instructions or advice to the Company's Office by wireless or e-mail.

The Master should normally comply with any order or orders he may receive from the Agents, or from a responsible representative of the Agents. If, in the Master's opinion, the execution of any such order or orders would subject the ship to unreasonable danger, or would in any way injure or jeopardise the interests of the Company, then he should inform the Agents in writing and ask for further instructions. Compliance with an order will not as a rule absolve the Master from blame for endangering the ship.

2.1.12 Bunkering

Subject to instructions from the Company and without shutting out cargo, the Master should arrange to take a maximum bunkers at ports where they are cheapest, under instructions of the Company's Bunkering Department.

The Master should see that he is kept fully and currently posted by the Chief Engineer on quantities of fuel remaining in bunkers, calling for a report at any time he thinks necessary in addition to the Chief Engineer's routine daily report.

2.1.13 Documents

Whenever taking over command of any vessel, and before departing from any port, the Master must personally satisfy himself that all ship's documents are in order and complete. (See the Topic on Ship's Documents.)

2.1.14 Disbursements

Apart from paying of crew's wages, harbour disbursements or any other disbursements, these will normally be made by the Company. The vouchers for disbursements must carefully checked by the Master before signature.

2.1.15 Advances

The master should draw from the Agents cash for any essential purpose. Such advances should be kept to a responsible minimum and under strict instructions from the Company's Crew Department.

2.1.16 Safety precautions

The Master must take a special care to ensure that all the Company's instructions regarding Boat Drill and Precautions against Fire are rigidly carried out; also that individual duties are allocated to and understood by his Officers, and that the latter are fully conversant with the working of all the appliances and equipment.

2.1.17 Smuggling and contraband

When contraband or smuggled goods are discovered on board, the Master must notify the Customs on arrival in port, and also report at the first opportunity any seizures or untoward incidents to the Company and also to the Outport Agent if such incident occurs in an Outport.

2.1.18 Messing

The Master is responsible for ensuring that a proper standard of messing is provided by the Chief Steward, or the Cook Steward and for dealing suitably with complaints from Officers or passengers on this subject. The diet provided should be wholesome, adequate and varied.

The Master will allot seats to Officers according to rank.

2.1.19 Unauthorised passengers and cargo

The Master must satisfy himself that the necessary steps have been taken to ensure that no passengers or cargo are carried in his vessel without proper authority.

2.1.20 Leave of absence

The Master may at his discretion grant leave of absence to Officers while in port, and may depute another Officer in his own absence to grant such leave, provided always that one Duty Officer in each of the Deck and Engine Room departments must be on board at all times, and that such leave may be granted only after the vessel is secure and free from danger.

2.1.21 Certificates of service

The master must not give written references when an Officer leaves his vessel. Application for such references must be made to the Company. An intending candidate for Mate's or Master's or Engineer's will receive from the Master on leaving the vessel a Certificate of Watchkeeping service and conduct.

2.1.22 Shifting ship in port

The Master must personally superintend the shifting and/or reberthing of his vessel in port.

2.1.23 Fuel economy

In general, the ship's economical speed must be maintained as laid down by the Company. The Master will co-operate closely with the Chief Engineer to ensure the maximum of economy in fuel consumption, consistent with the efficient operation of the ship, having regard to safety, maintenance of schedule, optimum times of arrival in port, and weather conditions.

The final decision as to speed required at any time rests with the Master, subject always to this being within the safe limits of the main engines. The value of the interests of economy of running the engines at a regular speed is emphasised.

The Chief Engineer must be given the longest possible notice before Main Engine power is required, whether for departure from port or for shifting ship in port. All such orders for Main Engine power, also for deck machinery, filling ballast tanks etc., should be given in writing to the Chief Engineer or the Engineer in charge.

2.1.24 Increase in lubrication oil consumption

It has been frequently observed that the daily consumption of lubricating oil of the main engine system, main engine cylinders and the generators is often excessive, reaching the maximum quantities permitted; this is unacceptable. It is also believed that lubricating oil prior to use is lost due to carelessness on the part of the crew.

Therefore, all Masters and Chief Engineers are instructed to carefully check lubricating oil leakages and avoid wastage due to crew negligence.

Also, the daily consumption of lubricants should be reduced to a minimum and to be used only when absolutely necessary according to maker's instructions.

Any lubricating oil found in double-bottom tanks should not be wasted but collected and pumped into empty barrels and used subsequently.

The above instructions must be strictly observed.

2. 2 CHIEF OFFICER

2.2.1 General

The Chief Officer is responsible to the Company and to the Master for the maintenance of the vessel, and for keeping all parts of it in his charge (i.e. excepting Engine Room spaces) free from rust, well painted and clean, and for the proper care and maintenance of all cargo gear, lifeboats, boat gear and fire appliances.

His particular attention is drawn to the separate " Maintenance" and "Cargo" sections of the Regulations and Instructions, which specially concern him.

2.2.2 inventory

Careful inventories must be taken every 12 months and copies forwarded to the Company.

2.2.3 Loading and working cargo.

The Chief Officer is responsible to the Master for the proper loading of the vessel, and must consult the Master regarding his requirements as to stowage and trim, or at any time when in doubt.

When cargo is being worked he will appoint the Second and Third Officers or if there is no Second and Third Officer, a member of the Crew to supervise stowage as he considers necessary.

When cargo is being loaded, he must be on board to see that his instructions are carried out.

During the loading, the Master and Chief Officer to be on board and supervise loading or discharging operations of stevedores.

Even if loading or discharging operations, and stowing, trimming, lashing, securing and dunnaging of cargo are done at the Charterer's risks and expenses, the Master and/or Chief Officer have to give Stevedores proper instructions regarding the handling of cargo and cargo gear in the holds as well as on deck. The Master and /or Chief Officer must also ensure that Stevedores do not handle the cargo or cargo gear in such a manner that the vessel or her gear may suffer any damage whatsoever. In other words, the Master and/or Chief Officer must assure themselves that stevedore damage is reduced to a minimum. If Stevedores refuse to follow the Master's or Chief Officer's instructions regarding the proper handling of the cargo and cargo gear the Agent must be notified thereof at once in writing. The Agent must then take all necessary steps with the local authorities to remedy to this unsatisfactory situation. To allow the Company to maintain her rights against the Charterers and/or the stevedores, the Master must make a detailed report of this event which has to be countersigned by the Agent and send to the Company as soon as possible.

If any lashing materials have been put on board by Charterers, the Chief Officer must make a detailed list giving a description and the exact quantity of each piece of material received and this list must be signed by both the Chief Officer and the Charterer or his representative. When returning the lashing material ashore the Chief Officer must request a receipt duly signed by the person who has received this material. Failing to do so may be at the sole responsibility and expense of the Chief Officer.

2.2.4 Tween deck scuppers

These should be tested regularly whenever there is an opportunity.

The Chief Officer is responsible for arranging the roster of cargo and/or duty officer's hours of duty and to avoid misunderstanding he shall make an entry in the deck log book confirming the arrangements. The question of adequate free time for recreation facilities for officers must also be borne in mind.

When cargo is being worked and at the discretion of the Chief Officer, shore leave may be granted to deck officers provided that this does not interfere with the maintenance of efficient cargo supervision.

2.2.5 Special cargo

The Chief Officer must personally supervise the arrangements for handling special cargo, namely:

- (1) Heavy Lifts, i.e. any single unit exceeding three tons in weight. The rigging of heavy lift gear and the lift must be under his personal charge at all time.
- (2) Specie. The handling of specie must be under his personal charge at all time.
- (3) Explosives. The handling of explosives must be under his personal charge at all time.

In addition to the Chief Officer's personal supervision, a Deck Officer must be in attendance when the following cargoes are being handled:

- (1) Heavy Timbers
- (2) Dangerous and Inflammable cargo
- (3) Refrigerated cargo
- (4) Vegetable oils.

His special attention is drawn to the directions regarding loading and stowage of these cargoes in the section of these regulations and Instructions dealing with loading and cargo.

2.2.6 Docking and overhauls

The Chief Officer is responsible for carefully checking the work (except Engine Room Work) carried out during overhaul, and should report to the Company about delays or bad workmanship. The Second and Third Officers will assist him as required.

2.2.7 Running repairs

When an indent is submitted for work to be done on board by Ship crew or Workshop, the Chief Officer must ensure that the Duty Officer is fully posted as to the nature of the job, in case he himself is not on board when the workmen arrive.

2.2.8 Anchors and cables

The Chief Officer will personally inspect anchors, cables, and running gear at regular intervals, entries being made in the Deck Log of all inspections.

2.2.9 Windlass and winches

Are to be kept clean and free from rust. Windlass hand gear is to be kept in good working order.

2.2.10 Fresh water

Chief Officers should acquaint themselves with the availability, quality and price of fresh water at different ports, so that requirements may be taken accordingly. Please be aware that fresh water is scarce and expensive in some ports, (e.g. Middle East), and supplies should be taken at ports prior to entering these ports as far as possible.

2.2.11 Life-saving and fire-fighting equipment

The Chief Officer will inspect all life-saving and fire-fighting equipment at regular intervals and assure himself that it is being properly maintained under the supervision of the Third Officer.

2.2.12 Life-boatmen's certificates

The Chief Officer should arrange to train crews for life-boatmen's Certificates in accordance with requirements.

2.2.13 Stores

The Chief Officer is responsible for the proper use of all Deck Stores and for seeing that these are used as economically as is consistent with the efficient upkeep of the vessel.

2.2.14 Dunnage

Dunnage and cargo mats are under the care of the Chief Officer, and he should see that these are used solely for the purpose for which they are provided. (See also 2.2.3. Loading and working deck cargo).

2.2.15 Ballast and double bottom tanks

When orders are given to pump up, pump out a tank, the Chief Officer is responsible for seeing that the order is correctly carried out, and he must obtain frequent soundings of other tanks and holds to ensure that all is in order.

He is responsible for the slipping and unslipping of ballast tank hatch covers and making them watertight; and also for all manhole covers of double bottom tanks in the holds and peaks.

When any member of the ship's personnel, a Superintendent or a Surveyor enters a tank, one member of the crew must be detailed to stand outside the tank manhole to raise an alarm in the event of an accident, or of the person failing to re-appear after a reasonable period. Before closing up a tank the utmost care must be exercised to ensure that there are no persons remaining inside the tank and that all suction, sounding and air filling pipes are clear.

When tanks are being filled, the Chief Officer must personally ensure that sounding pipes and air pipe covers have been removed.

2.2.16 Smuggling and stowaways

Immediately before sailing, and again prior to arrival at each port of call, the Chief Officer must carry out searches of deck, passenger and cargo spaces for stowaways and unmanifested cargo, allotting definite spaces to Junior Officers who will be responsible for a thorough search of them. All searches must be entered in the Deck Log Book.

2.2.17 Portable electric gear

The Chief Officer is responsible for the rigging of cargo lights and for their care whilst in use and for returning them after use to the Chief Engineer.

Lights other than working lights must not be rigged without the consent of the Master.

2. 3 SECOND OFFICER

2.3.1 Charts and sailing directories

The Second Officer is responsible to the Master for keeping all charts and Sailing Directories, List of Lights, Chart Catalogue and Radio Signals up-to-date, and for maintaining navigational gear (including gyro compass) in good working order and condition. Responsibility for maintenance of Radar, AIS, Ecdis, Echo Sounder and Direction Finder also rests with the Second Officer (or Radio Officer, if there is one on board).

2.3.2 Abstract log

The Second Officer (or Chief Officer) will keep an up-to-date Abstract Log and hand this to the Master at the end of each voyage. This Log must contain full details of any delays in working cargo and of all incidents affecting the ship during the voyage.

After a voyage or after leaving a port of call the Second Officer (or Chief Officer) must make the "Voyage Report" and "Harbour Report".

2.3.3 Clocks

Before leaving or entering port, the Second Office will personally check Bridge and Engine Room clocks, synchronising them with official time.

2.3.4 Cargo working

The duties of the Second Officer in connection with Cargo working will be as required by the Chief Officer.

2.3.5 Leaving port

Before "Stand By" is rung the Second Officer must satisfy himself that the propeller is clear.

2.3.6 Mails

Whenever Post Office Mails are carried, they MUST be tallied both in and out by the Second Officer in the presence of a Post Office Representative.

2.3.7 Vessel in port

In each port of call the Second Officer will ensure that the bridge and chart room are well locked and that all nautical instruments are well secured. If necessary and/or possible he will remove all valuable or small instruments from the bridge and lock them up in a secure place. He will ensure their replacements on the bridge on leaving port.

2. 4 THIRD OFFICER

2.4.1 Life-saving equipment

The Third Officer is responsible to the Chief Officer for the maintenance of all Life-Saving and Fire-Fighting Equipment.

2.4.2 Cargo

The duties of the Third Officer in connection with stowage and watching of cargo will be as directed by the Chief Officer. He will also be responsible for making up cargo plans from hatch sheets, when required.

2.4.3 Steering gear

The Third Officer is responsible for the testing of Steering Gear before leaving port, and for seeing that it is in good working condition, reporting to the Master when each test has been carried out.

2.4.4 Flags

The Third Officer is responsible for the maintenance and repair of flags.

2.4.5 Entering and leaving port

On arrival in the port the Third Officer will personally supervise the removal of all small gear from lifeboats (compasses, axes, charts, heliographs, torches, knives, wireless, drinking cups, etc) and have them placed under lock and key. He will similarly supervise their replacement in the boats on leaving port.

He will enter in the Bridge Note Book the times of all engine movements when entering, leaving and in port, also any special incidents.

2.5 DUTY OFFICER

The Officer acting as Duty Officer each day in port is responsible to the Chief Officer for supervision of cargo work, for seeing that the gangway is constantly attended, properly secured, and adjusted, and mooring lines attended, for supervision of current ship's business, all in accordance with the Chief Officer's directions. He must also keep the Deck Log Book written up.

When it is required to move main engines in port the Duty Officer will ascertain that the propeller is clear when requested to do so by the Engineer in charge and give the necessary permission when he has satisfied himself that it is safe to do so.

2.5.1 Flags

The Duty Officer is responsible for the raising and striking of flags at 8 a.m. and at official sunset respectively, and for attention during the day to tightening or slackening of halyards as necessary.

2.5.2 Derricks

When, during Cargo Working, the height of derricks needs to be altered, this work must be preformed by the Vessel's deck crew. On no account is the shore labour to be allowed to handle derrick gear or winches during the operation, without the duty officer being present.

Note

On vessels carrying two or three officers only (including the Master), the duties of the Second Officer and/or Third Officer must be properly divided by the Master among the officers available.

2.6 ENGINEER OFFICERS

2.6.1 General instructions and safety precautions

All Engineer Officers are required to acquaint themselves fully with the sections of the Fleet Instruction Book (1) containing General Instructions and (2) dealing with Boat

Drill and Safety Precautions against Fire, as well as with this particular section, which covers specific Engine Room duties and routines.

2.6.2 Chief engineer's general responsibility

The Chief Engineer is responsible for the proper handling and maintenance of the ship's Main Engines, Boilers and Auxiliary gear, Pumps, Winchers, Steering Engine and controlling gear, and other Deck Machinery.

He will report to the Master immediately should he know of or suspect anything, which adversely affects or may so affect the efficiency of the machinery in his charge.

He must satisfy himself that all Engineers serving under him are fully conversant with, and properly perform, the duties allocated to them.

He will advise the Master of any cases of misconduct occurring in his department, e.g.: absence without leave.

2.6.3 Absence from ship

Except under exceptional circumstances, and then only with the agreement of the Master, Chief Engineers must not be absent from their ship.

2.6.4 Watches

Except when the ship is safely at anchor or securely moored in port, full watches must be kept in the Engine Room, whether or not the vessel is under way e.g. including periods when she is anchored for fog, awaiting daylight etc., and the Engineer of the Watch must not leave the Engine Room until properly relieved by another Engineer. A sea watch must be kept in the Engine Room when a sea watch is maintained on the Bridge.

STAND BY. The Chief Engineer, in addition to watchkeeping officers, must be in attendance in the engine room during stand-by, entering or leaving port, and at other times in case of emergency.

In port, the engines must not be turned either by hand gear or power before a deck Officer has been informed of the intention to do so and then not until the latter has satisfied himself that the propeller is clear, when he will notify the Engineer in charge that it is in order to move the engines.

Prior to leaving port or shifting by main engines it is to be understood that when Stand-by is rung from the Bridge, that the propeller is clear and engines may be moved as required. When the Chief Engineer is satisfied that the engines are in all respects ready he will indicate this to the bridge by replying to the Stand-by order. After this reply has been given on no account must engines be worked except on order from the Bridge.

A different procedure will be ran when the engines are operated from the bridge. The Master must ascertain himself with the Chief Engineer that the engines are ready for use.

When the vessel is safely in port at anchor or securely moored, a fireman's Watch will be kept in the Engine Room, the Duty Motorman then being responsible that no gear is missing.

One Engineer Officer must at all times be on board, 5th Engineers are not to be left in charge without supervision of a senior engineer.

Throughout the Hurricane or Typhoon Season, Main Engines must be available at 8 hours notice. When this is not possible the Chief Engineer must inform the Master without delay in order that alternative arrangements may be made. This period of notice is liable to reduction at Master's discretion.

2.6.5 Fuel economy

Constant care and watchfulness must be exercised to ensure the maximum economy in fuel consumption, consistent with efficient operation of the ship, and with meeting the Master's requirements as to speed. The Chief Engineer will co-operate closely with the Master, who has the final decision on the speed required at any time, subject always to this being within the safe limits of the Main Engine.

The importance is emphasised to all concerned of running the engines at a regular speed.

If for any reason any order from the Master cannot be complied with, he must be informed at once.

2.6.6 Spare parts inventory

Spare parts registers are to be kept up-to-date and careful inventories must be completed on a continuous basis. From time to time Superintendents will carry out a spot check when visiting the ship.

2.6.7 Log book

The Chief Engineer is responsible for seeing that Engine Room Log Books are carefully and accurately entered up, and for signing each day's entries. The Log Book is to be written up in ink by watch-keeping engineers. Ship's position and distance run are to be entered up daily and engine revolutions recorded.

2.6.8 Bunkering

As a general rule, maximum bunkers should be taken at ports where they are cheapest.

Sometimes, however when good freights are obtainable, it may be more profitable to reserve the maximum deadweight for cargo even if this means taking more bunkers

at higher prices elsewhere. Such decisions will normally be made by the Company in consultation with the Master and Chief Engineer.

Apart from the daily report to the Master on the quantity bunkers remaining on board, the Chief Engineer must personally verify and report on this, in writing, if required, at any time at the Master's request.

2.6.9 Oil fuel bunkers

Accurate soundings must be taken of Shore Fuel tanks, trucks or barges before and after bunkering. It is important that the quantity of oil taken should be agreed upon immediately after bunkering. A copy of the Bunkering Report (form MS 105) signed by the Chief Engineer should be forwarded to the Company.

Care is to be taken before bunkering to see that all necessary valves are open, and strainer on filling pipe clean and in good order. Before allowing the supplier to commence filling ship's bunker tanks, particulars on the supplier's delivery or loading note must be examined to make sure that the correct type and grade of oil is to be supplied.

Vessels may only accept such oil of a viscosity not exceeding the limit laid down by the Company. In case of emergency higher or lower viscosities may be accepted after consultation with the Company.

Each time fuel oil is taken on board, the Chief Engineer must take a sample direct from the ship's manifold. This sample must be kept on board for at least 90 days for eventual analysis in case an abnormality is discovered during fuel consumption. (See also Standing Instructions N° 10 point 5). At regular intervals, when lubricating oil is taken on board a sample of the oil, previously used must be given to the Oil Company for analysis, (See also Standing Instructions N° 10).

When a vessel is trading in very cold climates, the Chief Engineer must ensure that sufficient oil is kept heated in bunker tanks to permit easy transfer to daily tanks.

2.6.10 Cleanliness in engine-room compartments

No oil should be allowed to accumulate in the bilges or on the tank-tops. At sea, provided the vessel is outside the legal prohibited limits for the discharge of oily water, these parts should be washed out and the wells pumped overboard.

If Anything is pumped overboard (which is very doubtful) it must be done in accordance with the Marpol Convention. In most ports and terminals, Governments must provide reception facilities for oil and oil derivative wastes such as bilge water, sludge, slop, dirty ballast, waste oil, solid sludge and trash. Oily water and the like may consequently not be pumped overboard but must be collected on board and discharged ashore in special reception tanks.

Bilges and tank tops should be examined every watch. No naked lights may be used in the bilges or oil fuel spaces. Fire Extinguishers should be kept charged and in good working order. All possible precautions are to be taken against Oil Fuel Fire,

which, if once started, are difficult to control. Any leakage of Oil from any source what ever should be attended to at once.

2.6.11 General engine room supervision

Personal attention and supervision is necessary. Firemen cannot always be relied upon. They should be watched carefully and constantly to ensure that they perform their duties efficiently.

2.6.12 Opening and cleaning oil fuel tanks

The following precautions are to be observed before any compartment which has contained Oil Fuel is entered :

- (a) The compartments to be opened are to be cleared of oil by the pumps as far as practicable.
- (b) Doors are to be removed and tank thoroughly ventilate by windsails, or other adequate means;
- (c) Only flashlights are to be used in the oil fuel compartments, until they are properly gas free.

The precautions referred to in (c) must also be taken in regard to compartments adjoining those containing oil fuel, on their being examined as to whether any oil leakage has taken place.

No one must enter a tank without the permission of the Chief Engineer and until the tank is certified "Gas Free". No matches are to be taken into tanks and/or naked lights used. The key of locked valves etc., on tanks, are to be kept in the Chief Engineer's room.

When steaming out oil fuel tanks for gas-freeing, care should be taken to see that steam is always flowing freely from the tank air pipe and at a regular rate for a fixed opening of the steam stop valve. Any reduction in the rate of steam flow may indicate choking of the air pipe or of the fire prevention fitting and should be cleared immediately otherwise the tank may be extensively damaged by steam pressure.

All cocks, valves, fittings, etc., on tanks should be over-hauled only while the tanks are empty.

Before tanks are filled, they must be inspected to ensure cleanliness, and to ensure that all suction, air and sounding pipes are clear after which nobody must enter the tank.

2.6.13 Ballast, double bottom & fresh watertanks

No water ballast may be pumped into or out of any double bottom or ballast tank, without a written order from the Master or Chief Officer to the Chief Engineer, who is responsible for the pumps and pipes to and from these tanks, and for their efficient

working. Such orders must be countersigned by the Chief Engineer and Duty Engineer Officer in acknowledgment of the order. To ensure that the tanks are properly filled and to avoid accidents, pressure should be sufficiently reduced when they are about $\frac{3}{4}$ full, the pump being stopped if necessary to allow air to escape and avoid excessive pressure on tank tops and/or bulkheads. Failure to observe these precautions has in the past caused heavy damage to vessel's tanks.

When orders are given to pump out a tank, the Chief Officer is responsible for seeing that the order is correctly carried out, and he must obtain frequent soundings of other tanks and holds to ensure that all is in order.

2.6.14 Engine room telegraph orders

The Engineer on watch must be constantly on the alert to ensure that all telegraph orders from the Bridge are promptly acknowledged and correctly carried out, all such orders being recorded, with time of receipt.

2.6.15 Testing of engine room telegraph

Tests must be carried out before arriving and leaving port to ensure that the telegraphs are in good working order. Such tests include checking that Bridge and Engine Room telegraph dial pointers correspond. If possible telegraphs should be tested at least 24 hours before the end of an overhaul, whether or not they have undergone repairs, and again well before stand-by prior to leaving the dockyard.

Care should be taken to ensure that the system is kept in clean and efficient working order at all times.

2.6.16 Electrical installations

The Chief Engineer is responsible for the upkeep and efficiency of all electrical installations on board, whether in machinery spaces or elsewhere, including all permanent wiring. Regular attention to the latter is important to avoid risk of fire from defects or worn insulation. The load on any circuit must not be increased above the designed figure by the fitting of extra lamps and appliances or higher powered lamps.

Portable electric gear, e.g. lights for working cargo, will be rigged from use by the Chief Officer, who is responsible for its care while in use and for return when no longer required.

2.6.17 Valves, cocks and connections

No cock, stop valve or connection to boilers, bilges, ballast tank or sea is to be opened or closed except under personal supervision of an Engineer Officer.

When any such cock, stop valve or connection is opened or closed, this is to be recorded on the blackboard by the Engineer on watch, who is responsible for the proper supervision of these connections, and also that the blackboard correctly records their actual condition. (i.e. whether open or closed) when he is relieved.

2.6.18 Steam and electrical connections

The Chief Engineer is responsible for all steam and electrical connections on deck from Engine and Boiler Rooms, and request from deck department for power or current for steering gear, winches, deck water services, filling or emptying of ballast tanks, etc., will be dealt with by him, or in his absence by the Engineer Officer in charge.

All such requests will be conveyed in writing.

When the power or current is no longer required, care must be taken to ensure that the connections are closed.

Every precaution must be taken to ensure that piping and electric wiring cannot be tampered with, especially wires controlling power or current to the driving unit of the steering gear.

2.6.19 Donkey boilers

Donkey boilers are to be opened up periodically, examined and cleaned and a report on condition, sent to the Company.

2.6.19 Steering engine

Electrical steering gear must be tested before it is required.

Spare Gear, including standard telemotor spares, must be kept in good order.

2.6.21 Turning gear

When the turning gear has to be used, it is the Second Engineer's responsibility to ensure that the main Engines and Propeller are clear for turning, but during the Second Engineer's absence it becomes the duty Engineer's responsibility, whether by day or by night. He should do this in collaboration with the Deck Officer on duty.

2.6.22 Equipment and spare gear

All equipment and spare gear must be inspected regularly and maintained in good order, and ready for immediate use.

2.6.23 Indicator cards

These must be sent to the Company every six months, and also at such other times as any alterations have been made to the machinery.

2.6.24 Cooling of stern tubes

If any doubt exists that the stern tube is not covered by after peak water, the Chief Engineer should request the Chief Officer or Officer in Charge to have the after peak sounded and, if low filled to the normal covering level.

2.6.25 Port regulations: over side discharge of oil, bilge water, ashes,etc

The Chief Engineer is responsible for seeing that all Port Regulations affecting his department are complied with, for example with regard to over side disposal of oily bilge water, or other waste material from the Engine Room.

Special attention is drawn to the importance of taking all possible precautions to prevent oil pollution of harbour and also of coastal waters.

2.6.26 Safety precautions – Fire

Fire-Fighting appliances must be maintained in first class order and all Engineers must be conversant with the use thereof.

2.6.27 Repairs and overhauls

Repairs requiring immediate attention on arrival in port, or for which the vessel's normal time in port does not provide an ample margin, should be notified to the Company by W/T in advance, so that preparations eventually through the Agents can be put in hand.

2.6.28 Running repairs

When a repair indent is sent requiring work to be done on board by shore labour, the Chief Engineer must ensure that all engineers are fully posted on the nature of the job, in case he himself is not on board when the workmen arrive.

Failure to provide for this is liable to increase the cost and duration of the work.

2.6.29 Certificate of service

The Chief Engineer must not give written references for Certificates of Service to Engineers serving under him, except in the case of candidates wishing to sit for examinations, in which case the watchkeeping and conduct certificate must be endorsed by the Company. In all other circumstances application for testimonials must be made to the Company.

2.7 RADIO OFFICERS

Since February 1999 the GMDSS (Global Maritime Distress Safety System) is in force. Cargo ships do not carry a Radio Officer anymore. Under the Rules of the GMDSS, the officer of the watch, must hold a DMDSS certificate to ensure proper radio communication.

In Ships where Radio Officers are still employed (like Passenger and Cruise ships), the Radio Officers are responsible for the proper care and maintenance of the equipment under their charge, namely, Wireless and Radar installations, Direction Finders, Echo Sounders , etc. and the spares, accessories and all equipment appertaining thereto.

Radio Officers are also responsible for making all requisite entries in Parts 1 and 2 of the Radiotelegraph Log in accordance with instructions laid down by the Government Authorities, for submitting both parts of this Log Daily to the Master for his signature and for ensuring that original copies of the Log are disposed of in accordance with current instructions whenever Articles are closed.

Radio Officers serving in Radar-fitted ships are required to keep manuscript log of all faults which have developed, maintenance carried out, and adjustments made, on the Radar equipment in their charge. Logs are to be submitted monthly in the form of a report to the Company, a summary of the number of hours the set has been in operation (extracted from the Radar Operation Log) being at the end of each report.

Faults occurring in Radar equipment which the Radio Officer in charge is incapable of repairing, or for which spares are not carried, should be reported to the Company without delay so that preparations can be made to effect repairs or to obtain the necessary spares before the ship reaches a port.

The Chief Engineer will give any assistance required by the Radio Officer, but no other officer or member of the crew may handle the wireless installations or equipment while at sea except at the direct request and under the immediate supervision of the Radio Officer.

No alterations may be made to installations except as necessary to rectify defects or breakdowns.

2.7.1 Private messages

Radio Officers will collect in cash and give a receipt for, the transmission fees for private messages sent for Officers and passengers, and these fees will be handed in to the Company, together with Monthly Traffic Statements.

The Master has discretion to refuse to permit transmission of any private message, but must be in a position to justify such refusal.

2.7.2 Uniform

Radio officers should wear uniform as advised by the Master.

2.7.3 Absence in port

Leave of absence in port is granted at the discretion of the Master.

Radio Officers going ashore and leaving the Installation unattended should advise the Duty Officer where they may be contacted and leave with him the key of the Wireless Office.

2.7.4 Repairs to equipment

In accordance with international rules and regulations of safety of life at sea, Radio Officers should have the qualifications and knowledge/experience to effect repairs to all navigational equipment, such as radar, Radio Station, Gyro Compass, Echo Sounder, Loran, Decca and all navigational instruments.

In cases where Radio Officers have no knowledge of the above, Master must sign them off as soon as possible and request for a replacement with the required knowledge to attend to duties professionally.

Master should not ask for technicians from ashore to carry out any such repairs but must ensure that these are completed on board.

When spares are required they may be acquired through our Technical Division at the Company.