#### CHAPTER 3

# SPECIFIC REGULATIONS AND INSTRUCTIONS REGARDING NAVIGATION

#### 3.1 SAFETY

THE SAFETY OF THE VESSEL AND OF THE LIVES AND PROPERTY ON BOARD IS AT ALL TIMES PARAMOUNT.

Maintenance of schedule dates is important but in no circumstances at the expenses of safe navigation, for which the Master is solely responsible to the Company.

#### 3.2 DUTIES OF OFFICER OF THE WATCH

The Officer of the Watch is responsible to the Master for the safety of the vessel while in his charge. Before relieving the Bridge he must verify that the vessel is on the course and in the position given by him. In case of doubt he must report to the Master, explaining the reasons for his doubt.

The chart in use (or Ecdis) and the GPS must be available at all times to the Officer of the Watch. If at any time he is in doubt as to the ship's position, he must immediately call the Master. In addition, the Master's orders to be called at any time, by day or night, must be most strictly adhered to. Should the Master not respond to the call, the Officer will send the Bridge Order Book for his instructions. If for any reason the Master fails to give written or verbal instructions, the Officer must stop the vessel, provided that in his opinion it is safe to do so; but if for any reason he considers that such action would endanger the vessel, he must haul clear of the danger before stopping. If the Master cannot be contacted at all, he should call the assistance of another Deck Officer, preferably higher in rank. Any such incident must be entered in the Deck Log Book.

He must not in any circumstances leave the Bridge until relieved by the Master or another Officer.

No alterations to the vessel's course or speed must be made until the Master has been notified and has given his instructions regarding new course and speed, except in an emergency, when prompt action must be taken and the Master called immediately.

When bearings are available, the Officer of the Watch must at frequent intervals, plot the ship's position on the chart.

In open water positions should be taken by observations at regular intervals, and Masters should encourage Junior Officers to this end, with a view to improvement of their navigation.

In the event of fog, mist, snow or heavy rain, Radar must be operational, speed must be reduced, the regular signals sounded and the Master called immediately

#### 3.3 HAZY WEATHER

During hazy weather or when the vessel's position is in doubt, the Radar and/or ARPA must be constantly in use, the AIS regularly checked, regular soundings must be taken and if possible, the vessel's position checked by a chain of soundings, With echo sounding apparatus, soundings must be continuous. Any neglect of this will be viewed seriously.

## 3.4 LOOK-OUT

A look-out must be maintained from sunset to sunrise. Should the ship be steering by autopilot the look-out can be kept from the bridge by the stand-by Seaman but under these circumstances it is essential that should the Seaman have to leave the bridge for any purpose the Officer of watch must maintain the look-out and on no account undertake any other duties. During periods of reduced visibility and in areas where heavy traffic is being experienced it is necessary that the look-out be kept in the foremost part of the ship and the ship steered by hand. Details to be entered in the Deck Log Book.

#### 3.5 STRANGE OR NARROW WATERS

Navigation in narrow channels is to be avoided unless there is no alternative route available, or unless conditions are such that a reasonable speed cannot be maintained in open waters.

When navigating in narrow or strange waters, all precautions must be taken for the safety of the vessel. Tidal information on the chart or in sailing directions must be carefully studied, and frequent checks made by bearings and soundings to verify that the vessel is maintaining a safe track.

If signs of fog become apparent while the vessel is in narrow waters, the Master must if possible haul out into open waters. If this is not possible, the vessel must be brought to anchor immediately fog sets in, unless the vessel can be safely navigated with the aid of the Radar (see "Radar Instructions").

## 3.6 APPROACHING LAND

When approaching land in poor visibility the vessel must be hove to until her position has been verified, if land is not sighted at a reasonable distance when expected. A blind trust to electronic navigation instruments must not be given and whenever possible, each instrument must be regularly checked.

#### 3.7 FLOATING AIDS

When navigation by floating aids, checks must be made to confirm that these aids are in their charted positions.

#### 3.8 ICE

When ice is present in an anchorage, only one anchor with a short scope of cable must be use, main engines being maintained on standby and an officer's watch kept throughout. The vessel must be got under way immediately if she begins to drag, or if other vessels are observed dragging towards her.

#### 3.9 ANCHOR WATCHES

When the vessel is at anchor in an open roadstead or sheltering from the weather, an officer's watch must be kept both by day and by night. The vessel's position must be verified by frequent bearings and these noted in the Log Book.

## 3.10 REGULATIONS FOR PREVENTION OF COLLISIONS AT SEA

These rules must be strictly observed, special attention being paid to Rules 19 and 9. The Master must satisfy himself that all his Officers are fully conversant with all these rules.

# 3.11 CHARTS AND SAILING DIRECTORIES, LISTS OF LIGHTS AND RADIO SIGNALS

These must be kept strictly up to date, and all corrections made must be entered in the Company's Chart Correction Book.

## **3.12 NOTICES TO MARINERS**

The Company issues these Notices to all ships as they are received, but it is also the Master's duty to obtain the latest copies available, and any local Notices, at ports of call, from Mercantile Marine Officers, Consulates or Port Authorities.

## 3.13 SIGNALLING

All Officers are expected to be proficient in signalling of all kinds, especially Morse lamp signalling. They are urged to practice frequently with Naval vessels which are always ready to respond, and with other vessels, provided that such practice does not interfere with other duties or with efficient watch keeping

#### 3.14 NAVIGATION AIDS

DIRECTION FINDER. Bearing by this equipment can only be obtained accurately by constant practice, and Masters should see that Officers have every opportunity to taking bearings. In this connection attention is drawn to Maker's instructions, particularly with regard to tuning, as failure to do so can result in inaccurate bearings. Attention is also drawn to the Admiralty lists of Radio Signals Vol. II on the reliable employment of Radio Beacon signals.

RADAR. This aid must be used regularly, and all Officers are expected to be proficient in its use. Officers should study the Maker's book of instructions to gain a working knowledge of the set.

Any defect or faulty performance must be reported to the Company whether or not the fault has been rectified on board. In this connection the Master's attention is drawn to the necessity of carefully entering in the Radar Log the actual times Radar is in use; this is essential to trace the life of the various component parts, which have a direct bearing on the efficiency of the set.

Radar must be regularly used in clear weather in order to accustom Officers to its use and to enable radar-locate positions to be checked with visual bearings. In addition, to ensure that the set is in reliable condition, the following checks should be frequently made:

- (a) check range scale
- (b) check system performance, in accordance with Maker's instructions.
- (c) check relative bearings, especially when equipment can be set for relative or true bearings.

The Radar must be regarded as an valuable AID to navigation, which should be used in conjunction with the customary means of navigation. It should constantly be in operation and be especially used when approaching the coast, when entering or leaving harbours and to make an early detection of Risk of Collision as described in the International Regulations for Preventing Collisions at Sea. Its installation in no way removes liability to conform strictly to the Regulations for Preventing Collisions at Sea or any special rules issued by Harbour Authorities.

Officers should be proficient in the art of Plotting.

Regarding the use of Radar, special attention must be paid to Rules 5, 6, 7 and 8 of the International Regulations for Preventing Collisions at Sea, 1972.

Accurate entries must be made in the Log Books provided for operations and maintenance, and must be checked personally by the Master before being entered. Particular attention must be given to entries in Part 2 of the Operational Log, this providing for detailed elaboration of entries in Part 1

#### 3.15 COMPASSES

The Master must satisfy himself that accurate errors of the Magnetic and Gyro compasses are regularly obtained and must make a habit of swinging the ship for a complete table of errors at regular intervals. A form giving position of magnets must be filled in after every adjustment and filed for reference, a copy being sent to the Company.

Gyro Compasses are delicate instruments requiring careful handling and exact and regular maintenance, and special attention must be given to the parts requiring regular cleaning and oiling in accordance with maker's instructions.

#### 3.16 HARBOUR MANOEUVRING

The need for extreme caution when navigating in harbours is emphasised, and also the need for strict adherence to Port Regulations.

All possible precautions must be taken to guard against damage to wharves and pontoons when coming alongside. When approaching a berth, all circumstances must be taken into account, such as tide, weather conditions and other traffic including lighters, before closing the berth. Full use of anchors must be made when berthing to avoid damage.

The possibility must also be borne in mind of infringement of the Regulations for Prevention of Collision at Sea, and/or of Harbour Regulations, by other vessels on the vicinity; and alertness must be maintained at all times to take any action necessitated by such infringement, even if such action is in contravention of rules.

Masters must make themselves conversant with the types of all moorings in ports at which they call, to avoid fouling these moorings should it be necessary to drop anchor.

## 3.17 HURRICANES ANS TYPHOONS

When a weather report is received indicating approach of a hurricane or a typhoon likely to enter the area in which the vessel is located or through which she will be travelling, all necessary action must be taken to avoid the full force of the storm. If in a port engines must be on standby, all shore leave stopped, and the vessel prepared to ride out the storm, a safe anchorage being sought if it is expected that the storm will strike the port. In the latter case, if the harbour is crowded, the shift to a safe anchorage should be made in good time to ensure a good sheltered berth.

When the N° 1 signal is hoisted, all Officers and crew must return on board at once. When a definite gale signal is hoisted, no vessel should remain at, or moor to, a hurricane or typhoon buoy if she can be safely shifted under her own power to a hurricane or typhoon anchorage, before conditions become too adverse.

During the hurricane or typhoon season, steam must be kept on main engines for 8 hours' notice when within the hurricane or typhoon area.

When anchoring for an impending hurricane or typhoon, ample cable must be payed out at once, without waiting until the force of the storm is felt, as paying out the tends to disturb anchors.

The spare bower must be hung off in readiness for letting go, with 30 fathoms stream cable and 4" wire attached.

### 3.18 ORDERS TO ENGINE ROOM

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 of for deck machinery power, filling ballast tanks etc. should be given in writing to the Chief Engineer and Engineer in charge.

#### 3.19 DECK LOG BOOK

This must be kept currently written up (at sea, by the Officer of the Watch, in port by the Duty Officer), entries being made carefully and neatly in ink. On no circumstances may any entry be erased, alterations being made by ruling through the wrong entry with a red ink line, so that it remains still legible, and a fresh entry made against it. Alterations must be initialled.

Any entry must be made of all headlands, giving bearing and distance off, when abeam, or on alteration of course.

Speed to be recorded in the Deck Log Book is the vessel's speed through the water as registered by the log.

The Deck Log Book must also record:

- (1) Rate and set of current, every opportunity being taken to observe these, and the position at noon.
- (2) Hold temperature readings, whenever taken.
- (3) Daily quantities of cargo loaded or discharged, giving number of packages, or if bulk cargo, tons.
- (4) All examinations of cargo doors, fire patrol inspections, boat musters and drills, fire drills, inspections and tests of fire appliances, life-saving equipment.
- (5) All circumstances leading up to or concerning any stranding, collision, fire or other incident.
- (6) All searches for stowaways and unmanifested cargo.

#### 3.20 BRIDGE ORDER BOOK

This book will be written up before the Master retires for the night, and will contain explicit instructions as to his wishes. The ship's position at the time of writing his orders must be entered in the book and marked on the chart by the Master. If during the night the issued orders expire the book must be brought to the Master for writing out further orders.

It is emphasised that this book is not solely for use during the hours of darkness; and should the Master for any reason retire during daylight hours while the vessel is in coastal waters, the Bridge order Book must be written up beforehand.

Absence of definite written orders in the case of a casualty, from whatever cause, will be viewed seriously.

The Master's standing orders must be written up fully in the front of the Bridge Order Book.

All entries and signatures must be in ink.

#### 3.21 BRIDGE NOTE BOOK

Times and items are to be recorded in this book by the duty officer on the bridge as follows:

- (a) All engine movements
- (b) All messages passed between Bridge and Engine Room.
- (c) Pilot and other boats (e.g. Immigration, Port Health etc.) arrivals and departures.
- (d) Other items on note which are to be recorded later in the Deck Log Book. This book is to be initialled by the officer recording the details, and also by the master at the termination of each set of entries.

In the event of a casualty this book must be very carefully preserved and all relevant details recorded in the Deck Log Book.

#### 3.22 PROTESTS

Protest should only be noted on the following occasions:

- (a) When heavy weather damage to cargo destined for all ports is involved.
- (b) When loss of life or injury to personal ashore and afloat is concerned.
- (c) When damage to the ship is expected.
- (d) Collision.

All incidents which may affect ship or cargo should be recorded in the Official Log.

In all cases substantial damage to cargo by heavy weather is faired Masters should cable the Company agents at the next port of call to arrange Hatch Survey by independent surveyors. Relevant log extracts, plus any additional comments thought necessary, should be sent to ALL ports of discharge with a copy to Head Office.

#### 3.23 TOWAGE.

No hard and fast regulations can be laid down in advance as to towage, as cases differ, and much depends on conditions of tow and available gear.

In the case of a pre-arranged tow if time permits, the Company must be consulted. The method decided upon must be followed, apart from unforeseen circumstances.

In the case of a disabled vessel taken in tow in open waters, connection should be made, when practicable, by 15 fathoms bower cable outside the stern of the towing vessel, connected to the largest wire available, thence on to 60 fathoms of the disabled vessel's cable. A lazy wire between the vessels should be arranged in order to assist in reconnecting should the tow part.

The towing vessel should arrange to distribute the weight of the tow by half turn of the tow rope to at least 4 sets of bitts, with the end anchor around the mainmast, Bulks of timber should be so placed as to avoid chafing at ship's quarter and in way of break in decks, etc.

#### 3.24 SALVAGE

In the event of a Company's vessel being called upon to help a vessel in distress, the Master of the disabled vessel MUST BE NOTIFIED AND MUST acknowledge that settlement will be made in accordance with Lloyd's Standard Form of Salvage Agreement.

In all cases a complete and accurate record of all signals and communications, however transmitted, between the two vessels must be kept.

In the event of a owned ship or managed ship requiring assistance as the result of stranding, collision, fire or breakdown, no salvage agreement should be entered into without the full consent and knowledge of the Company. Should time not permit reference to the Company, the Master should endeavour to obtain assistance on hourly or daily basis (with written evidence of such where possible) but if this cannot be satisfactory arranged then aid may have to be accepted under Lloyd's Standard Form of Salvage Agreement.

First choice for services should of course, always go to ship that flies the same flag, and preferably the same house-flag. This will avoid complexities due to varying laws of maritime nations and settlement of claims will be facilitated.

#### 3.25 CASUALTIES

In all cases the first duty of the Master is to ascertain that the Company's vessel is seaworthy and if so, in the case of collision, all possible assistance required by the other vessel must be given.

All circumstances leading up to or concerning any collision, fire, stranding or other accident, at sea or in port, must be recorded in the Bridge Note Book and details carefully checked before being entered in the Deck Log Book and the Official Log Book.

COLLISION. In ALL cases of collision, the name and port of registry of the other vessel, the nature and extent of damage to her cargo, and loss of life or injury (if any) to her crew or passengers must be ascertained as soon and as accurately as possible and noted in the Official Log Book.

IN NO CIRCUMSTANCES WHATEVER MUST ANY LIABILITY BE ADMITTED VERBALLY OR IN WRITING, ON BEHALF OF THE COMPANY'S VESSEL OR OF THE COMPANY, FOR ANY DAMAGE OR INJURY OR LOSS OF LIFE.

If damage to the other vessel and her cargo occurs then it must be personally inspected as soon as possible, but not until a statement has been made to her Master, in the presence of witnesses, that such inspection is entirely without prejudice to liability. If possible a written acknowledgement from the Master of the other vessel should be obtained to this effect.

Whenever possible the Master of the other vessel must be notified in writing that his vessel is held responsible for all damage, injury and loss of life resulting from the collision.

## 3.26 CASUALTY REPORTS

Procedure for reporting casualties must be strictly carried out as follows:

A. IN THE CASE OF ALL CASUALTIES OR ACCIDENTS (however slight).

These must be reported:

report headed as follows:			
	Date	M.V. "	"
	Master's Name		
Name of Officer on Duty			

(1) To the Company, immediately by Radio, and as soon as possible by a written

Nature of Casualty \_\_\_\_\_

Time:

Place:

Weather:

Tide:

Draft:

B. IN THE CASE OF MORE SERIOUS CASUALTIES, INVOLVING LOSS OF LIFE OR SERIOUS INJURY TO ANY PERSON, FIRE, STRANDING, COLLISION OR OTHER CASUALTY AFFECTING THE SHIP'S SEAWORTHINESS OR THE EFFICIENCY OF HER HULL OR ANY PART OF HER MACHINERY.

In addition to the procedure described under Section A. (1) above, further reports must also be made:

To the appropriate Government Dept. of the vessels registry as soon as possible on arrival at the first port, for a further copy being sent to the Company.

Additionally, in cases where the ship's seaworthiness could be affected in any way, reports must also be made :

- (a) to the classification Society of the Vessel, or to Lloyd's Agents at the first port of call, with a request for survey of the damage and issue of a Seaworthiness Certificate, WHICH MUST IN ALL CASES BE OBTAINED BEFORE THE SHIP LEAVES PORT.
- (b) to the Authority issuing the Cargo Safety Construction Safety Certificate, ship's licence (if any). Such Authority may wish to appoint their own surveyor to inspect the damage before agreeing to the ship, proceeding, or alternatives may agree to accept the findings of the Classification Surveyor.

#### 3.26.1 Harbour accidents

In the addition to the reports required under section A and B above, accidents occurring within the limits of a port should also be notified in writing to the Harbour Authorities concerned.

#### 3.26.2 Protests

In all cases of casualty a protest must be noted.

## 3.26.3 Reports on serious casualties involving third parties

Should his ship be involved in a **major or serious** casualty involving a third party (e.g. collision), the Master's written report, required in all cases under Paragraph A. (1) above, **should be addressed and sent to the Company's Head Office**.

In all such cases, Masters must take special care that all information, that may be required by the Company's Head Office to guide action by them to save life or property, or to direct the movements of ships, is reported direct to the company by radio. Such information should include details or estimates of the extent of damage or delay to the Master's own ship and her own probable movements.

## 3.27 BALLAST AND FRESH WATER TANKS

No water ballast may be pumped into or out of any double bottom or ballast tank, without an order from the master or Chief Engineer to the Engineer who is responsible for the pumps and pipes to and from the tanks, and for their efficient working. Such orders must be entered in the Tank Book provided, which will be signed by the Chief Engineer in acknowledgement of the order.

To ensure that the tanks are properly filled and to avoid accidents (especially in the case of fresh water being pumped in under pressure by a water boat), tanks must be sounded constantly during pumping, and pressure sufficiently reduced when they are about 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 tightening up manhole doors and tank top covers, care must be taken to get an equal strain on each bolt being screwed home and before the rest have taken the weight.

Double Bottom Tanks should, when necessary, always be run up, care being taken that air cushions are not left in filled tanks. Pumping is unnecessary.

Deep Tanks, when used for water ballast, must always be pumped full before proceeding to sea, to avoid injury to tank top plating or hatches by movement of slack water in the tank in a sea way. When pumping up, the sounding plug must be removed from the hatch cover for sounding, and pumping stopped when water is half way up the hatch coaming. On no account must water be forced up through the air pipes.

Care must also be taken with slack tanks, which, at sea, can seriously jeopardise the ship's stability.