

INSTRUCTIONS FOR OFFICERS OF THE WATCH

Based on IMO STCW-95 ch.VIII with 2010 Manila Amendments, COLREG and SOLAS ch. V and its supplementary requirements for INS (Integrated Navigation System) on route planning and on MRM (Maritime Resource Management) recommendations. In order to ensure safe and effective operations on the bridge, the watch personnel must be well acquainted with the existing regulations. The prevailing circumstances may require procedures such as mentioned in MARPOL, the "Decision support system" of the vessel (SOLAS ch. III reg. 29), ISM chs. 7 - 8, the ISPS-code, or in regulations for special vessels.

THE MASTER

bears the ultimate responsibility for the safety of the vessel, and

- shall, prior to each voyage, ensure that the intended route from berth to berth is planned, using adequate charts and nautical publications necessary for the intended voyage
- shall ensure the officer of the watch is familiar with all navigational equipment prior to his watch
- shall organise the watch to be suited to the vessel, and plan watch rotation so that all, including master, have sufficient rest periods
- shall issue appropriate standing and special orders in clear and simple manner for the watch, and supplement them as necessary.

Watch keeping on the bridge is teamwork and shall be organized to suit the needs of the vessel and her voyage (see MRM).

When the Master is taking over or returns to the watch he/she shall expressly inform the officer of the watch and other watch personnel.

VESSEL TEAM and MRM

Maritime Resource Management (MRM) is essential in the team work on the vessel.

MRM reduces risk by helping vessel's crew anticipate and correctly respond to the changing situation of their vessel.

MRM includes all crew members in the team work.

- MRM reflect on
- Situation awareness
- Communication and briefing
- Judgement and decision making
- Assertiveness
- Fatigue

THE CO-PILOT SYSTEM AND MRM

The co-pilot system is used to increase safety.

The master decides if and when the co-pilot system shall be put into effect, e.g. while navigating in the archipelago, in fog and in congested waters.

Implementing the co-pilot system means manning the bridge with two qualified navigators - the pilot and the co-pilot.

The pilot conducts and navigates the vessel. He keeps the co-pilot well informed of coming actions at all times.

The Co-pilot assists the pilot and actively follows the proposed actions, so as to be prepared at any given moment to take over the control of the vessel.

THE OFFICER OF THE WATCH

is at all times responsible for the safe navigation of the vessel, until the master specifically announces s/he is taking over, and

- must not be occupied with activities that may interfere with the vessel's safe navigation
- shall in no circumstances leave the bridge until properly relieved
- shall carefully follow the master's standing and special orders issued for the watch.
- shall give the watch personnel clear and concise orders
- must not assign the lookout such tasks that may prevent them from carrying out their duties
- shall comply with the relevant checklists
- shall comply with the "Safety Management System" (SMS) and "International Ship and Port Facility Security Code" (ISPS) manuals observed on board
- must be familiar with Bridge Navigational Watch Alarm System (BNWAS).

He or she shall, during the watch, monitor e.g.

- the vessels position
- the gyro and the magnetic compass
- relevant lights and signals
- the ECDIS, GPS, AIS and other navigational electronic equipment which may have an impact on safe navigation
- radio communication according to GMDSS-regulations.

He or she shall alert the master and follow the master's specific instructions

- if there is a significant change in the circumstances
- at any malfunction of the engines, steering gear or other navigational equipment
- in the event of any other danger or unclear situation.

TAKING OVER THE WATCH

The departing watch shall inform the relieving watch in full of all matters that may affect the vessel's safe navigation and seaworthiness.

The departing watch shall not be relieved during a manoeuvre or during any other action taken to avoid hazardous situations.

Prior to taking over the watch, the relieving watch shall be fully acquainted with the prevailing circumstances.

The relieving watch shall pay particular attention to

- nearby vessels
- own vessel's position, course and speed
- squat and bank effect, depth of water, draught, speed, trim and list
- navigational warnings (Navtex, MSI)
- standing and special orders.

The watch must not be handed over to anyone presumed to be incapable of performing watch duties.

THE LOOKOUT

A vigilant and constant lookout shall be kept by sight, by hearing and by radar, so as to detect risk of collision, grounding or other hazards in good time.

The lookout

- shall be well acquainted with their duties, understand their tasks and report his observations as agreed
- must not be occupied with other activities that may keep them from carrying out their duties.

THE PILOT ON BOARD

does not relieve the officer of the watch from the responsibility of navigating the vessel and ensuring its safety.

The officer of the watch shall make sure, that

- the pilot is specifically informed of the draught and manoeuvrability of the vessel, receives the required information of the Pilot Card as well as any other information affecting the vessel's safety

- the vessel's positions are continuously followed
- the radar range scale is not altered without notifying the pilot
- the pilot's orders are correctly understood and carried out.

The master shall report to the pilot in person, upon leaving the bridge.

The officer of the watch shall work in close co-operation with the pilot. If the pilot's actions give cause for concern, a clarification shall be requested. The officer of the watch shall, if called for, promptly take whatever action is necessary and inform the master immediately.

Embarkation and disembarkation of the pilot

Make sure the pilot ladder is in order in advance. Life buoy, heaving line and manropes shall be positioned by the pilot ladder, and the lighting shall be adequate.

The officer of the watch shall supervise the pilot's embarking and disembarking, while maintaining contact with the bridge in an appropriate way.

Before disembarking, the officer of the watch shall request the pilot for information concerning the vessel's position as well as that of other vessels, current and tide conditions and other relevant information.

MANOEUVRING THE VESSEL

The officers of the watch shall be properly familiar with the operation of the engine controls on the bridge, with manual and automatic steering as well as with the characteristics of the vessel's manoeuvrability.

Information of the vessel's stopping distance and turning ability shall be found in the "Wheelhouse Poster".

The anchors shall be ready for immediate use in narrow waters.

Use the steering method appropriate to the situation.

Manual steering shall be used in critical situations if it contributes to the vessel's safety.

Check the automatic steering to make sure it is steering according to the desired steering mode.

Make sure the helmsman is familiar with the vessel's steering controls, understands the helm commands and knows how to steer well.

Course alterations shall be ordered either by stating a specific angle of the helm and/or a specific compass bearing, using internationally recognized commands. Make sure the stated helm order is correctly carried out.

Follow the Collision Regulations and use steering signals.

If in doubt, do not hesitate to reduce speed so as to cope with the situation.

NAVIGATING THE VESSEL

The voyage shall be carefully planned in advance by using information from e.g.

- voyage planning guidelines
- ECDIS
- pilot books
- tide tables
- weather forecasts
- vessel traffic reporting regulations
- maritime safety information (MSI)
- port instructions.

Plan for "what if" scenarios, especially in narrow waters and/or areas of heavy traffic.

The positions shall be verified frequently.

- Monitor the fixed track!
- Monitor the vessels course!
- Identify the seamarks!
- Follow the prescribed traffic separation scheme!
- Use the correct parameters on ECDIS!
- Use independent means of position fixing points!

Ensure that correct parameters are chosen for radar, electronic chart and positioning devices.

Environmental considerations

Environmental areas should be marked in the voyage plan as per MARPOL and other relevant regulations

- note the restrictions for pollution in the water and air, as well as waste disposal

Navigating in ice conditions

Ice conditions may lead to misinterpretation on the radar display.

Ice may affect vessels's turning ability.

Floating seamarks may be unreliable and often missing.

Snow and frost may distort sector lights.

The position shall be determined in the usual way even when the vessel is being assisted by an icebreaker, or is proceeding in an ice channel.

The vessel must be ready to stop promptly.

ANTI-COLLISION PRECAUTIONS

Use always the radar and AIS!

Use binoculars, listen!

Approaching vessels shall be observed well in advance by frequent observations.

Adjust the vessel's speed to the prevailing circumstances and situations.

The give-way vessel shall take clear avoidance actions well in advance. The effectiveness of the actions shall be carefully monitored until the other vessel has been passed by and cleared completely.

Do not make any avoidance manoeuvre on the basis of insufficient information!

If the give-way vessel is not taking appropriate avoiding actions, its attention shall be attracted by sound and light signals, by searchlights and/or VHF. If the vessel still fails to take the appropriate avoiding action:

Give way!

Restricted visibility

- Notify the master, if so agreed!
- Keep at a safe speed!
- Post a lookout!
- Listen!
- Sound fog signals!
- Use all radar systems, if called for!
- Use radar plotting or systematically observe whether there is risk of a close-quarters situation!

Avoid close-quarters situations!

If only one radar is in use, alter the range scale frequently in order to detect both short and long-range echoes.

If several persons are using the same radar, ensure that everyone is notified when the range scale is altered.

Pay attention to the blind sector of the radar!

Bear in mind the different alternatives MRM and the co-pilot system can offer.

ANCHORAGE

Pay attention to possible anchorage restrictions and look out for cables/pipelines on seafloor!

When selecting anchorage

- consider the depth, sea bottom, wind, tidal conditions and the position of other vessels.

After anchoring

- determine the vessel's exact position and activate two EBL and VRM on the radar.

At anchor pay attention to

- the prescribed lights and shapes
- the effects of weather, tide and current
- sound signals in reduced visibility.

The vessel shall be under constant surveillance and lookout shall be maintained.

Be aware of the risk of your own or another vessel's dragging or swinging. Should risk arise, the engines shall immediately be made ready for manoeuvring and the master shall be alerted.

