

## RESOLUTION A.285(VIII)

*Adopted on 20 November 1973  
Agenda item 10*

### RECOMMENDATION ON BASIC PRINCIPLES AND OPERATIONAL GUIDANCE RELATING TO NAVIGATIONAL WATCHKEEPING

THE ASSEMBLY,

NOTING that Council at its twenty-fifth session decided that urgent consideration should be given to the question of training requirements and the principles relating to the keeping of a navigational watch,

TAKING INTO ACCOUNT the contents of Recommendation 39 adopted by the International Conference on Safety of Life at Sea, 1960,

RECOGNIZING the complexity of the problem and the urgent need to deal with it in a manner which should lead to its early and most effective solution,

HAVING EXAMINED AND APPROVED the Reports of the twenty-seventh and twenty-eighth sessions of the Maritime Safety Committee,

RESOLVES to recommend to Member Governments that they implement as soon as practicable the measures contained in Annexes A and B to this Recommendation.

#### ANNEX A

##### BASIC PRINCIPLES TO BE OBSERVED IN KEEPING A NAVIGATIONAL WATCH

Member Governments shall direct the attention of shipowners, masters and watchkeeping personnel to the following principles which shall be observed to ensure that a safe navigational watch is maintained.

- (a) The master of every ship is bound to ensure that the watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under his general direction, the officers of the watch are responsible for navigating the ship safely during their periods of duty when they will be particularly concerned to avoid collision and stranding.
- (b) The basic principles including but not limited to the following shall be taken into account by all ships:
  - (i) **Watch arrangements**

The composition of the watch, including the requirement for look-out(s), shall at all times be adequate and appropriate to the prevailing circumstances and conditions.

When deciding the composition of the watch on the bridge the following points are among those to be taken into account:

- (1) at no time shall the bridge be left unattended;
- (2) the weather conditions, visibility and whether there is daylight or darkness;

- (3) the proximity of navigational hazards which may make it necessary for the officer in charge to carry out additional navigational duties;
- (4) the use and operational condition of navigational aids such as radar or electronic position-indicating devices and any other equipment affecting the safe navigation of the ship;
- (5) whether the ship is fitted with automatic steering;
- (6) any additional demands on the navigational watch that may arise as a result of special operational circumstances.

**(ii) Fitness for duty**

The watch system shall be such that the efficiency of the watchkeeping members of the crew is not impaired by fatigue. Accordingly the duties shall be so organized that the first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit when going on duty.

**(iii) Navigation**

- (1) The intended voyage shall be planned in advance taking into consideration all pertinent information and any course laid down shall be checked.
- (2) On taking over the watch the ship's estimated or true position, intended track, course and speed shall be confirmed; any navigational hazard expected to be encountered during the watch shall be noted.
- (3) During the watch the course steered, position and speed shall be checked at sufficiently frequent intervals using any available navigational aids necessary to ensure that the ship follows the planned course.
- (4) The safety and navigational equipment with which the ship is provided and the manner of its operation shall be clearly understood; in addition its operational condition shall be fully taken into account.
- (5) Whoever is in charge of a navigational watch shall not be assigned or undertake any duties which would interfere with the safe navigation of the ship.

**(iv) Look-out**

Every ship shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision, stranding and other hazards to navigation. Additionally, the duties of the look-out shall include the detection of ships or aircraft in distress, shipwrecked persons, wrecks and debris. In applying these principles the following shall be observed:

- (1) whoever is keeping a look-out must be able to give full attention to that task and no duties shall be assigned or undertaken which would interfere with the keeping of a proper look-out;
- (2) the duties of the person on look-out and helmsman are separate and the helmsman should not be considered the person on look-out while steering; except in small vessels where an unobstructed all round view is provided at the steering position and there is no impairment of night vision or other impediment to the keeping of a proper look-out;
- (3) there may be circumstances in which the officer of the watch can safely be the sole look-out in daylight. However, this practice shall only be followed after the situation has been carefully assessed on each occasion and it has been established without doubt that it is safe to do so. Full account shall be taken of all relevant factors including but not limited to the state of weather, conditions of visibility, traffic density, proximity of navigational hazards and if navigating in or near a traffic separation scheme. Assistance must be summoned to the bridge when any change in the situation necessitates this and such assistance must be immediately available.

**(v) Navigation with pilot embarked**

Despite the duties and obligations of a pilot, his presence on board does not relieve the master or officer in charge of the watch from their duties and obligations for the safety of the ship. The master and the pilot shall exchange information regarding navigation procedures, local conditions and the ship's characteristics.

**(vi) Protection of the marine environment**

The master and officer in charge of the watch shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution particularly within the existing framework of existing international regulations.

## ANNEX B

### OPERATIONAL GUIDANCE FOR OFFICERS IN CHARGE OF A NAVIGATIONAL WATCH

#### INTRODUCTION

1. This document contains operational guidance of general application for officers in charge of a navigational watch, which masters are expected to supplement as appropriate. It is essential that officers of the watch appreciate that the efficient performance of their duties is necessary in the interest of safety of life and property at sea and the avoidance of pollution of the marine environment.

#### GENERAL

2. The officer of the watch is the master's representative and his primary responsibility at all times is the safe navigation of the vessel. He must at all times comply with the applicable regulations for preventing collisions at sea (see also paragraphs 23 and 24).

3. The officer of the watch should keep his watch on the bridge which he should in no circumstances leave until properly relieved. It is of especial importance that at all times the officer of the watch ensures that an efficient look-out is maintained. In a vessel with a separate chart room the officer of the watch may visit this, when essential, for a short period for the necessary performance of his navigational duties, but he should previously satisfy himself that it is safe to do so and ensure that an efficient look-out is maintained.

4. There may be circumstances in which the officer of the watch can safely be the sole look-out in daylight. However, this practice shall only be followed after the situation has been carefully assessed on each occasion and it has been established without doubt that it is safe to do so. Full account shall be taken of all relevant factors including but not limited to the state of weather, conditions of visibility, traffic density, proximity of navigational hazards and if navigating in or near a traffic separation scheme.

When the officer of the watch is acting as the sole look-out he must not hesitate to summon assistance to the bridge, and when for any reason he is unable to give his undivided attention to the look-out such assistance must be immediately available.

5. The officer of the watch should bear in mind that the engines are at his disposal and he should not hesitate to use them in case of need. However, timely notice of intended variations of engine speed should be given when possible. He should also keep prominently in mind the manoeuvring capabilities of his ship including its stopping distance.

6. The officer of the watch should also bear in mind that the sound signalling apparatus is at his disposal and he should not hesitate to use it in accordance with the applicable regulations for preventing collisions at sea.

7. The officer of the watch continues to be responsible for the safe navigation of the vessel despite the presence of the master on the bridge until the master informs him specifically that he has assumed responsibility and this is mutually understood.

#### TAKING OVER THE WATCH

8. The officer of the watch should not hand over the watch to the relieving officer if he has any reason to believe that the latter is apparently under any disability which would preclude him from carrying out his duties effectively. If in doubt, the officer of the watch should inform the master accordingly. The relieving officer of the watch should ensure that members of his watch are apparently fully capable of performing their duties and in particular the adjustment to night vision.

9. The relieving officer should not take over the watch until his vision is fully adjusted to the light conditions and he has personally satisfied himself regarding:

- (a) standing orders and other special instructions of the master relating to the navigation of the vessel;
- (b) the position, course, speed and draught of the vessel;
- (c) prevailing and predicted tides, currents, weather, visibility and the effect of these factors upon course and speed;
- (d) the navigational situation including but not limited to the following:
  - (i) the operational condition of all navigational and safety equipment being used or likely to be used during the watch;

- (ii) errors of gyro and magnetic compasses;
- (iii) the presence and movement of vessels in sight or known to be in the vicinity;
- (iv) conditions and hazards likely to be encountered during his watch;
- (v) the possible effects of heel, trim, water density and squat on underkeel clearance.

10. If at the time the officer of the watch is to be relieved a manoeuvre or other action to avoid any hazard is taking place, the relief of the officer should be deferred until such action is completed.

#### PERIODIC CHECKS OF NAVIGATIONAL EQUIPMENT

11. The officer of the watch should make regular checks to ensure that:
- (a) the helmsman or the automatic pilot is steering the correct course;
  - (b) the standard compass error is established at least once a watch and when possible, after any major alteration of course. The standard and the gyro compasses should be frequently compared; repeaters should be synchronized with their master compass;
  - (c) the automatic pilot is tested in the manual position at least once a watch;
  - (d) the navigation and signal lights and other navigational equipment are functioning properly.

#### AUTOMATIC PILOT

12. Officers of the watch should bear in mind the need to station the helmsman and to put the steering into manual control in good time to allow any potentially hazardous situation to be dealt with in a safe manner. With a vessel under automatic steering it is highly dangerous to allow a situation to develop to the point where the officer of the watch is without assistance and has to break the continuity of the look-out in order to take emergency action. The change-over from automatic to manual steering and vice versa should be made by, or under the supervision of, a responsible officer.

#### ELECTRONIC NAVIGATIONAL AIDS

13. The officer of the watch should be thoroughly familiar with the use of electronic navigational aids carried, including their capabilities and limitations.

#### ECHO-SOUNDER

14. The echo-sounder is a valuable navigational aid and should be used whenever appropriate.

#### NAVIGATIONAL RECORDS

15. A proper record of the movements and activities of the vessel should be kept during the watch.

#### RADAR

16. The officer of the watch should use the radar when appropriate and whenever restricted visibility is encountered or expected and at all times in congested waters having due regard to its limitations.

17. Whenever radar is in use, the officer of the watch should select an appropriate range scale, observe the display carefully and plot effectively.

18. The officer of the watch should ensure that range scales employed are changed at sufficiently frequent intervals so that echoes are detected as early as possible and that small or poor echoes do not escape detection.

19. The officer of the watch should ensure that plotting or systematic analysis is commenced in ample time, remembering that sufficient time can be made available by reducing speed if necessary.

20. In clear weather, whenever possible, the officer of the watch should carry out radar practice.

#### NAVIGATION IN COASTAL WATERS

21. The largest scale chart on board, suitable for the area and corrected with the latest available information, should be used. Fixes should be taken at frequent intervals; whenever circumstances allow, fixing should be carried out by more than one method.

22. The officer of the watch should positively identify all relevant navigation marks.

#### CLEAR WEATHER

23. The officer of the watch should take frequent and accurate compass bearings of approaching vessels as a means of early detection of risk of collision; such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range. He should also take early and positive action in compliance with the applicable regulations for preventing collisions at sea and subsequently check that such action is having the desired effect.

#### RESTRICTED VISIBILITY

24. When restricted visibility is encountered or suspected, the first responsibility of the officer of the watch is to comply with the relevant rules of the applicable regulations for preventing collisions at sea, with particular regard to the sounding of fog signals, proceeding at a moderate\* speed and he shall have the engines ready for immediate manoeuvres. In addition, he should:

- (a) inform the master (see paragraph 25);
- (b) post look-out(s) and helmsman and, in congested waters, revert to hand steering immediately;
- (c) exhibit navigation lights;
- (d) operate and use the radar.

It is important that the officer of the watch should have the manoeuvring capabilities including the "stopping distance" of his own vessel prominently in mind.

#### CALLING THE MASTER

25. The officer of the watch should notify the master immediately under the following circumstances:

- (a) if restricted visibility is encountered or suspected;
- (b) if the traffic conditions or the movements of other vessels are causing concern;
- (c) if difficulty is experienced in maintaining course;
- (d) on failure to sight land, a navigation mark or to obtain soundings by the expected time;
- (e) if land or a navigation mark is sighted or a change in soundings occurs unexpectedly;
- (f) on the breakdown of the engines, steering gear or any essential navigational equipment;
- (g) in heavy weather if in any doubt about the possibility of weather damage;
- (h) in any other emergency or situation in which he is in any doubt.

Despite the requirement to notify the master immediately in the foregoing circumstances, the officer of the watch should in addition not hesitate to take immediate action for the safety of the ship, where circumstances so require.

#### NAVIGATION WITH PILOT EMBARKED

26. Despite the duties and obligations of a pilot, his presence on board does not relieve the officer of the watch from his duties and obligations for the safety of the ship. He should co-operate closely with the pilot and maintain an accurate check on the vessel's positions and movements. If he is in any doubt as to the pilot's actions or intentions, he should seek clarification from the pilot and if doubt still exists he should notify the master immediately and take whatever action is necessary before the master arrives.

#### THE WATCHKEEPING PERSONNEL

27. The officer of the watch should give the watchkeeping personnel all appropriate instructions and information which will ensure the keeping of a safe watch including an appropriate look-out.

#### SHIP AT ANCHOR

28. If the master considers it necessary a continuous navigational watch should be maintained. In all circumstances, however, the officer of the watch should:

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\* The Regulations for Preventing Collisions at Sea, 1960, presently in force, using the words "moderate speed".  
The International Regulations for Preventing Collisions at Sea, 1972, expected to come into force in 1976, use the words "safe speed".

- (a) determine and plot the ship's position on the appropriate chart as soon as practicable and at sufficiently frequent intervals check when circumstances permit, by taking bearings of fixed navigational marks or readily identifiable shore objects, whether the ship is remaining securely at anchor;
- (b) ensure that an efficient look-out is maintained;
- (c) ensure that inspection rounds of the vessel are made periodically;
- (d) observe meteorological and tidal conditions and the state of the sea;
- (e) notify the master and undertake all necessary measures if the vessel drags the anchor;
- (f) ensure that the state of readiness of the main engines and other machinery is in accordance with the master's instructions;
- (g) if visibility deteriorates notify the master and comply with the applicable regulations for preventing collisions at sea;
- (h) ensure that the vessel exhibits the appropriate lights and shapes and that appropriate sound signals are made at all times;
- (i) take measures to protect the environment from pollution by the ship and comply with the applicable pollution regulations.

**RESOLUTION A.286(VIII)**

*Adopted on 20 November 1973  
Agenda item 10*

**RECOMMENDATION ON TRAINING AND QUALIFICATIONS  
OF OFFICERS AND CREWS OF SHIPS CARRYING  
HAZARDOUS OR NOXIOUS CHEMICALS IN BULK**

THE ASSEMBLY,

NOTING Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

RECOGNIZING the importance and urgency of establishing mandatory minimum requirements for the training of officers and key ratings having special responsibilities for handling hazardous or noxious chemicals in bulk,

HAVING CONSIDERED the Reports of the Maritime Safety Committee on its twenty-seventh and twenty-eighth sessions,

RESOLVES:

- (a) to endorse the Recommendation on Training and Qualifications of Officers and Crews of Ships Carrying Hazardous or Noxious Chemicals in Bulk, the text of which is at Annex hereto;
- (b) to urge all Member Governments to give effect to the contents of the Recommendation as soon as practicable.