



ST. VINCENT AND THE GRENADINES

MARITIME ADMINISTRATION

CIRCULAR N° STCW 003

GUIDELINES FOR KEEPING A SAFE WATCH ON BOARD

**INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING
CERTIFICATION AND WATCHKEEPING FOR SEAFARERS
(STCW 1978 AS AMENDED) – STCW CODE, SECTION A-VIII
IMO RESOLUTIONS A.285 (VIII), A.337 (IX), A.893 (21)
IMO CIRCULARS MSC/CIRC.867, MSC/CIRC.566, STCW.7/CIRC.14
ISC BRIDGE PROCEDURES GUIDE, MCA MGN 315(M)**

**TO: SHIPOWNERS, SHIPS' OPERATORS AND MANAGERS, MASTERS,
SURVEYORS TO FLAG STATE ADMINISTRATION
RECOGNIZED ORGANIZATIONS**

APPLICABLE TO: SEAGOING VESSELS AS PER ARTICLE III OF STCW78
AS AMENDED

ENTRY INTO FORCE: DATE OF THE PRESENT CIRCULAR

Monaco, 25th May 2009

General

It is the responsibility of Masters, and companies owning or operating St Vincent and the Grenadines registered vessels, to ensure that the principles applying to the keeping of a safe watch, as detailed in STCW 78 as amended are followed.

According to STCW Code, IMO Resolutions and Circulars and taking into an account guidelines from ICS and MCA, this circular contains guidance for officers in charge of a navigational watch, which Masters are expected to supplement as they consider appropriate.

It is essential that Officers in charge of navigational watch appreciate that the proper performance of their duties is necessary in the interests of the safety of life and property at sea and the prevention of pollution to the marine environment.

The Master should not be constrained by the ship owner, charterer or any person from taking any decision which, in the Master's professional judgment, is necessary for safe navigation. It is the duty of the Master of every vessel to ensure that watch keeping arrangements are adequate for maintaining a safe navigational watch at all times.

The Officer in charge of navigational watch is the Master's representative and is primarily responsible at all times for the safe navigation of the vessel and for complying with the International Regulations for Preventing Collisions At Sea.

It is of special importance that the Officer in charge of navigational watch ensures that at all times an efficient look-out is maintained and that International Regulations for Preventing Collisions At Sea are complied with.

Officers in charge of navigational watch and Masters are reminded that the vessel must at all times proceed at a safe speed.

The vessel's engines are at the disposal of the Officer in charge of navigational watch and there should be no hesitation in using them in case of need. Where possible, timely notice of intended variations of engine speed should be given to the duty engineer. The Officer in charge of navigational watch should know the handling characteristics of the vessel including

the stopping distance, and should appreciate that other vessels may have different handling characteristics.

Officers in charge of a navigational watch are responsible for navigating the vessel safely during their periods of duty with particular concerns for avoiding collision and stranding.

The officer in charge of navigational watch should also be aware of the serious effects of operational or accidental pollution of the marine environment and should take all possible precautions to prevent such pollution.

Masters, owners and operators are reminded that the St Vincent and the Grenadines Maritime Administration considers it dangerous and irresponsible for the Officer in charge of navigational watch to act as sole look-out during periods of darkness or restricted visibility.

Fitness for Duty

Hours of Rest should be applied according to STCW Code, Chapter VIII/1 to all seafarers employed or engaged in any capacity on board a seagoing vessel and includes Officers and Ratings assigned to bridge watch keeping duties.

A minimum of **ten (10) hours rest** in any 24 hour period should be provided to the mentioned seafarers. Hours of rest may be divided into no more than two periods, one of which should be at least **six (6) hours** long.

The minimum period of ten hours may be reduced to not less than **6 consecutive hours** provided that any such reduction does not extend beyond two days and not less than **70 hours** of rest are seven-day period.

The requirements for rest periods need not be maintained in case of an emergency or drill or in other overriding operational conditions.

The watch system should be such that the efficiency of watch keeping personnel is not impaired by fatigue. The Master should take into account the quality and quantity of rest taken by the watch keepers when determining fitness for duty.

It is the overall responsibility of the Master and the responsibility of every watch keeping Officer and Rating to ensure that they are sufficiently rested prior to taking over a navigational watch. It is the responsibility of the owner or operator to ensure that the vessel is manned with a sufficient number of personnel so that a safe navigational watch can be maintained at all times by appropriately qualified and rested personnel in all foreseeable circumstances.

Watch keepers should ensure they remain alert by moving around frequently and ensuring good ventilation.

The Officer in charge of navigational watch should be free from the effects of alcohol and any other substance, including prescription drugs or other medication that may have a detrimental effect on the officer's judgments.

Navigational Watch

The officer in charge of navigational watch should:

- in no circumstances leave the bridge until properly relieved by an appropriate Officer
- continue to be responsible for the safe navigation of the vessel despite the presence of the Master on the bridge until informed specifically that the Master has assumed the con and this is mutually understood
- notify the Master when in any doubt as to what action to take in the interests of safety
- continue to be responsible for the safe navigation of the vessel despite the presence of a pilot on board
- if in any doubt as to the pilot's actions or intentions, seek clarification from the pilot; if doubt still exists, they should notify the Master immediately and take whatever action is necessary until the Master arrives
- not undertake any other duties that would interfere or compromise the keeping of a safe navigational watch

- ensure there are no distractions caused by the use of domestic radios, cassettes, CD players, personal computers, television sets, mobile phones, etc
- have available at all times, the services of a qualified helmsman
- in areas of high traffic density, in conditions of restricted visibility and in all hazardous navigational situations ensure the vessel is in hand steering
- keep in mind that the perceptions of watch keeping Officers on different types and sizes of vessels may vary considerably when assessing a close quarter situation and the time in which avoiding action should be taken
- keep a proper record during the watch on the movement and activities relating to the navigation of the vessel
- station a person to steer the vessel 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. Officers are further reminded that when the vessel is in automatic steering it is highly dangerous to allow a situation to develop to the point where the officer in charge of navigational watch is without assistance and has to break the continuity of the look-out in order to take emergency action
- use the radar at all times in areas of high traffic density and whenever restricted visibility is encountered or expected and shall have due regard to its limitations. Radar should be available for use at all times to enable the officers to use the equipment in clear weather so as to fully appreciate the limitations of the equipment
- at sufficiently frequent intervals during the watch check the vessel's position, course and speed using all appropriate navigational aids and means necessary to ensure that the vessel follows the planned track
- take fixes at frequent intervals. These fixes shall be carried out by more than one method whenever circumstances allow. The largest scale chart on board, suitable for the area and corrected with the latest available information shall be used. This includes local navigation warnings, and temporary and preliminary notices to mariners

Mariners are also reminded of the requirement to use the latest editions of all supporting navigational publications such as charts, list of lights, list of radio signals, pilot books etc. Such publications should be updated/corrected.

Watch Arrangements

The composition of a navigational watch should comprise one (or more) qualified Officers supported by appropriately qualified ratings. The actual number of Officers and Ratings on watch at a particular time will depend on the prevailing circumstances and conditions.

At no time shall the bridge be left unmanned without a qualified watch keeping officer.

Factors to be taken into account when composing a bridge watch:

- fatigue
- weather conditions and visibility
- proximity of navigational hazards which may make it necessary for the Officer in charge of the watch to carry out additional navigational duties
- use and operational condition of navigational aids
- whether the vessel is fitted with automatic steering
- whether there are radio duties to be performed
- unmanned machinery space (**UMS**) alarms, controls and indicators provided on the bridge, procedures for their use and limitations
- any unusual demands on the navigational watch that may arise as a result of special operational circumstances

In circumstances where a single man bridge is considered permissible support personnel should be readily and immediately available should assistance be required. There should be an established and continuously available means of communications for the watch keeper to summon such assistance in all times.

Handing Over the Watch

The Officer in charge of navigational watch should:

- ensure that the members of the relieving watch are fully capable of performing their duties
- ensure that the vision of the relieving watch is fully adjusted to the light conditions
- ensure that all standing orders and the Master's night orders are fully understood

The officer in charge of navigational watch should not hand over the watch:

- if there is reason to believe that the relieving Officer is not capable of carrying out the watch keeping duties effectively, in which case the Master should be notified
- when a manoeuvre is in progress until such action has been completed

Taking Over the Watch

The relieving officer in charge of navigational watch should:

- prior to taking over the watch verify the vessel's estimated or true position
- confirm the vessel's intended track, course and speed
- note any dangers to navigation expected to be encountered during the watch
- be aware of prevailing and predicted tides, currents, weather, visibility and the effect of these factors upon course and speed
- note any errors in gyro and magnetic compasses
- note the status of all bridge equipment
- note the settings of bridge/engine controls and manning of engine room
- be aware of the presence and movement of vessels in sight or known to be in the vicinity
- give watch keeping personnel all appropriate instructions and information which will ensure the keeping of a safe navigational watch, including maintenance of a proper look-out

Look-out

The International Regulations for Preventing Collisions At Sea require that every vessel should 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 risk of collision.

The look-out must be able to give full attention to the keeping of a proper look-out and no other duties should be undertaken that could interfere with that task. The duties of the look-out and helmsman are separate and the helmsman should not be considered to be a look-out except in small vessels where an un-obstructed 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.

In certain circumstances of clear daylight conditions the Master may consider that the officer in charge of navigational watch may be the sole look-out. On each occasion the Master should ensure that:

- The prevailing situation has been carefully assessed and it has been established without a doubt that it is safe to do so;
- Full account has been taken of all the relevant factors including not limited to:
 - state of the weather
 - visibility
 - traffic density
 - proximity of dangers to navigation
 - the attention necessary when navigating in or near traffic separation schemes
 - design and layout of the bridge
 - arcs of visibility

- radar equipment fitted and their limitations with respect to navigation
- other duties that the officer may have to engage in and which could be a distraction from the keeping of a proper look-out such as:
 - a. operation of GMDSS and other communications equipment such as cell phones and email systems
 - b. navigational maintenance such as completion of logs and other record keeping and correction of charts and publications
 - c. routine testing and maintenance of bridge equipment

In any event, an Officer in charge of navigational watch acting as sole look-out should always be able to fully perform both the duties of a look-out and those of keeping a safe navigational watch. Assistance must be immediately available to be summoned to the bridge when any change in the situation so requires.

It is of special importance that at all times the Officer in charge of the navigational watch ensures that a proper look-out is maintained. In vessels with a separate chartroom the Officer in charge of the navigational watch may visit the chartroom, when essential, for a short period for the necessary performance of navigational duties, but should first ensure that it is safe to do so and that a proper look-out is maintained.

Relationship Between the Officer in charge of navigational watch and the Look-out

The officer in charge of navigational watch should consider the look-out as an integral part of the Bridge Team and utilise the look-out to the fullest extent.

As a way of fully engaging the look-out's attention consideration should be given to keeping the look-out apprised of the current navigational situation with regard to expected traffic, buoyage, weather, landfall, pilotage and any other circumstance relevant to good watch keeping.

In Restricted Visibility

When restricted visibility is encountered or expected, the first responsibility of the Officer in charge of navigational watch should comply with the International Regulations for Preventing Collisions At Sea with particular regard to the keeping of a look-out, sounding of fog signals, proceeding at a safe speed and having the engines ready for immediate manoeuvre.

In addition the Officer in charge of navigational watch should:

- inform the Master
- ensure that a dedicated look-out is posted at all times
- exhibit navigation lights
- operate and use the radar
- put the engines on standby

Safe Speed and Stopping Distance

The International Regulations for Preventing Collisions At Sea require that every vessel should at all times proceed at a safe speed so that proper effective action can be taken to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

In cases of need, the officer in charge of navigational watch shall not hesitate to use the engines to reduce speed further and allow more time for consideration and assessment of a developing situation. However, timely notice of the intended variations of engine speed shall be given to the engineers where possible or effective use made of UMS engine controls.

Whatever the pressure on Masters to make a quick passage or to meet the owners' wishes, operators, charterers or port operators is, it does not justify vessels and those on board to be unnecessarily put at risk. The St Vincent and the Grenadines Maritime Administration is concerned that proper standards be maintained and will take appropriate action against officers who jeopardize their vessels or the lives and property of others. Such action may lead to fines and/or the suspension or cancellation of their certificates.

Vessel at Anchor

The Officer in charge of navigational watch should:

- determine and plot the vessel's position on the appropriate chart as soon as practicable
- when circumstances permit, check at sufficiently frequent intervals whether the vessel is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects. The use of carefully chosen transits can give an almost instant indication as to whether the vessel's position has changed
- ensure that a proper look-out is maintained
- ensure that inspection rounds are made periodically
- observe meteorological and tidal conditions and state of sea, notify the Master and undertake all necessary measures if the vessel drags anchor
- ensure the state of readiness of the main engines and other machinery complies with the Masters requirements
- ensure the vessel exhibits the appropriate lights and shapes and that appropriate sound signals as per International Regulations for Preventing Collisions At Sea are made
- avoid placing reliance on guard zones when using radar in lieu of a look-out as this is not considered acceptable practice.

In all the above circumstances it remains the Master's responsibility to ensure that the anchor watch to be kept is appropriate to the prevailing conditions.

Navigation with pilot on board

Despite the duties and obligations of pilots, their presence on board does not relieve the Master or Officer in charge of the navigational watch from their duties and obligations for the safety of the ship. The Master and the pilot should exchange information regarding navigation procedures, local conditions and the ship's characteristics. The Master and/or the Officer in charge of the navigational watch should co-operate closely with the pilot and maintain an accurate check on the ship's position and movement.

If in any doubt as to the pilot's actions or intentions, the Officer in charge of the navigational watch should seek clarification from the pilot and, if doubt still exists, should notify the Master immediately and take whatever action is necessary before the Master arrives.

Officer of the navigational watch acting as the sole look-out during periods of darkness

This Administration highlights that solo watch keeping in periods of darkness would have a potentially adverse impact on safety of navigation and protection of the marine environment.

In this regard no Officer of the navigational watch acting as the sole look-out during periods of darkness is allowed.

Voyage Planning

The development of a plan for voyage or passage and the close and continuous monitoring of the vessel's position during the execution of such a plan are of vital importance for safety of life at sea, safety and efficiency of navigation and protection of the marine environment.

The need for voyage and passage planning applies to all vessels.

The detailed voyage or passage plan should include the following:

- the plotting of the intended route or track of the voyage or passage on appropriate scale charts
- the true direction of the planned route or track
- areas of danger
- existing ships' routing and reporting systems
- vessel traffic services
- any areas where marine environmental protection considerations apply;

Voyage Plan (from berth to berth) should be carefully prepared keeping in mind IMO Resolution A.893(21) hereby annexed.

Watch in Port

The objections for keeping a watch when the ship is in port are as follows:

- to ensure the safety of life, ship, cargo and port
- to observe international, national and local rules
- to maintain order and the normal routine of the ship.

Detailed recommendation on principles and operational guidance for deck officers in charge of a watch in port is contained in annexed Resolution A.337 (IX).

Engine Room Watch

Rating forms part of an engine room watch, the watch keeper should be qualified to the standards and hold certification prescribed in Table A-III/4 of STCW, according to the duties required to be performed.

No member of the engine room watch should be required to enter the engine room alone, except under controlled conditions (IMO Resolution A.481 (XII) paragraph 7.3).

Certification

The Regulations require that any Officer in charge of a navigational watch should be duly qualified in accordance with the requirements of STCW 95. It is the responsibility of the owner or operator, and Master to ensure that every navigational watch keeping Officer is appropriately qualified with respect to the size of the vessel and limitations in area of operation. Under no circumstances is it permitted for an un-qualified person to take charge of a navigational watch. Similarly STCW 95 Section A-II/4 requires that every rating forming part of a navigational watch on a seagoing vessel of 500 GT or more should be required to demonstrate competence in the duties associated with the keeping of a safe navigational watch at the support level. This competence is evidenced by the issue of a Navigational Watch Rating Certificate. No rating should be assigned to navigational watch keeping duties unless suitably qualified.

Officer in charge of an engineering watch should be duly qualified in accordance with the requirements of STCW 95.

Rating forming part of watch in a manned engine-room or designated to perform duties in a periodically unmanned engine room should be duly qualified with STCW 95 Section A-III/4.

The annexed of the following IMO Resolutions and Circulars should be read in conjunction with this Circular.

RESOLUTION A.285 (VIII)

RESOLUTION A.337 (IX)

RESOLUTION A.481 (XII)

RESOLUTION A.893 (21)

CIRCULAR / MSC/Circ.867

CIRCULAR / MSC/Circ.566

STCW.7/Circ.14

Title	Res / Assembly / Res. A.285(8)
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INTERNATIONAL MARITIME ORGANIZATION

RESOLUTION A.285(VIII)

Adopted on 20 November 1973

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, sea density, proximity of navigational hazards and if navigating in or near a traffic separation scheme.

(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 81 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(5) 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 MATTER

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:

- (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 navigation 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.

Title	Res / Assembly / Res. A.337(9)
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INTERNATIONAL MARITIME ORGANIZATION

RESOLUTION A.337 (IX)

Adopted on 12 November 1975

RECOMMENDATION ON PRINCIPLES AND OPERATIONAL GUIDANCE FOR DECK OFFICERS IN CHARGE OF A WATCH IN PORT

THE ASSEMBLY,

NOTING Article 16(i) of the IMCO Convention concerning the functions of the Assembly,

RECALLING Resolution A.285(VIII) concerning basic principles and operational guidance relating to navigational watchkeeping,

HAVING CONSIDERED the Report of the Maritime Safety Committee on its thirty-second session,

ADOPTS the Recommendation on Principles and Operational Guidance for Deck Officers in Charge of a Watch in Port contained in the Annex to this Resolution,

RECOMMENDS that Member Governments implement as soon as practicable the measures contained in this Recommendation .

ANNEX

RECOMMENDATION ON PRINCIPLES AND OPERATIONAL GUIDANCE FOR DECK OFFICERS IN CHARGE OF A WATCH IN PORT

I. Introduction

1. This Recommendation applies to a ship safely moored alongside or safely at anchor under normal circumstances in port. For ships at an exposed anchorage reference should be made to the additional precautions contained in the Recommendation on Basic Principles and Operational Guidance Relating to Navigational Watchkeeping. Special requirements may be necessary for special types of ships and/or cargo.

2. The following principles and operational guidance should be taken into account by ship-owners, masters and watchkeeping officers,

II. Watch and its Arrangements

3. Arrangements for keeping a watch when the ship is in port should be:

(a) to ensure the safety of life, ship, cargo and port;

(b) to observe international, national and local rules;

(c) to maintain order and the normal routine of the ship.

4. The ship's master decides the number of men who will make up the watch and the duration of the watch, depending on the conditions of mooring, the type of the ship and character of duties.

5. There should always be a qualified deck officer in charge of the watch except in vessels under 500 gross register tons not carrying dangerous cargo where the master may appoint whoever has appropriate qualifications to keep the watch in port.

6. The arrangements of the necessary equipment should be such as to provide the most efficient performance of the duties by every watchkeeper

III. Taking Over the Watch

7. 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

8. The relieving officer should be informed by the officer being relieved on

(a) the depth of water at the berth, ship's draught, the level and time of high and low waters; fastening of the moorings, arrangements of the anchor(s) and the slip of the chain, and other features of mooring important for the safety of the ship; state of main engines and availability for emergency use;

(b) all work to be performed on board ship; the nature, amount and disposition of cargo loaded or remaining or any residues after unloading on board ship;

(c) the level of water in bilges and ballast tanks;

(d) the signals and/or lights being exhibited;

(e) the authorized persons on board and the number of crew members required to be on board;

(f) the state of fire-fighting appliances;

(g) any special port regulations;

(h) the master's standing and special orders;

(i) the lines of communication that are available between the ship and the dock staff and/or port authorities in the event of an emergency arising or assistance being required ;

(j) other circumstances of importance to the safety of the ship and protection of the environment from pollution.

9. The relieving officer should satisfy himself that:

(a) fastenings of moorings and/or anchor chain are adequate;

(b) the appropriate signals and/or lights are properly hoisted and exhibited;

(c) safety measures and fire protection regulations are being maintained,

(d) he is aware of the nature of any hazardous/dangerous cargo being loaded or discharged and the appropriate action in the event of any spillage and / or fire;

(e) no external conditions and circumstances imperil the ship and that his own ship does not imperil others.

10. If, at the moment of handing over the watch, an important operation is being performed it should be concluded by the officer being relieved, except when ordered otherwise by the master

IV. Keeping a Watch

11. The watchkeeping officer should:

(a) make rounds to inspect the ship at appropriate intervals,

(b) pay particular attention to:

(i) the condition and fastening of the gangway, anchor chain and/or moorings, especially at the turn of the tide or in berths with a large rise and fall and, if necessary, take measures to ensure that they are in a normal working condition ;

(ii) the draught, underkeel clearance and the state of the ship to avoid dangerous listing and trim during cargo handling and/or ballasting;

(iii) the state of the weather and sea,

(iv) observance of all Regulations concerning safety precautions and fire protection;

(v) water level in bilges and tanks;

(vi) any other persons on board and their location, especially those in remote or enclosed spaces;

(vii) the exhibition of any signals and/or lights;

(c) in bad weather, or on receiving a storm-warning, take the necessary measures to protect the ship, the personnel and the cargo;

(d) take every precaution to prevent pollution of the environment by his own ship;

(e) in an emergency threatening the safety of the ship, raise the alarm, inform the master, take all possible measures to prevent any damage to the ship and, if necessary, request assistance from the shore authorities and/or neighbouring ships;

(f) be aware of the state of stability so that in the event of fire the shore fire-fighting authority may be advised of the quantities of water that can be pumped on board without endangering the ship;

(g) offer assistance to ships or persons in distress;

(h) take the necessary precautions to prevent accidents or damage when propellers are to be turned;

(i) enter on a log-book all important events affecting the ship.

Title	Res / Assembly / Res. A.481(12)
Amendment Status	Revoked by Res.A.890(21)

RESOLUTION A.481(XII)

Adopted on 19 November 1981

PRINCIPLES OF SAFE MANNING

THE ASSEMBLY,

RECALLING Article 16(i) of the Convention on the Governmental Maritime Consultative Organization,

RECALLING FURTHER Article 29(a) of that Convention which requires Maritime Safety Committee to consider, inter alia, the manning of sea-going ships a safety standpoint,

NOTING that safe manning is function of the number of qualified or experienced seafarers necessary for the safety of the ship, crew, passengers, cargo and property and for a seafarers, 1978,

RECOGNIZING the importance of the requirements of the pertinent instruments adopted by ILO, IMCO, ITU and WHO for maritime safety and protection of the marine environment and in particular, the ILO Merchant shipping (Minimum standard) Convention, 1976 (NO.147) and the International Convention on standards of Training, Certification and Watchkeeping for seafarers, 1978,

BEING AWARE that the ability of seafarers to maintain observance of these requirements is dependent upon their continues efficiency through conditions relating to training, hours of work and rest, occupational safety, health and hygiene and the proper provision of food,

BELIEVING that international acceptance of board principle as a framework for administrations to determine the safe manning of shops would materially enhance maritime safety,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its forty-fourth session,

1. URGES Member Governments to take the necessary steps to ensure that every sea-going ship to which the International Convention on standards of Training, Certification and Watchkeeping for Seafarers, 1978, applies carries on board at all times a document issued by the Administration specifying the minimum safe manning required for such ship and containing the information given in annex 1 to this resolution;
2. URGES FURTHER that Member Governments, when exercising port state control functions under international conventions in force with respect to a foreign ship visiting their port, should regard compliance with such a document as evidence that the ship is safely manned;
3. RECOMMENDS that, in establishing the minimum safe manning for each such ship, Administrations observe the following broad principle and take into account the guidelines set out in Annex 2 the present resolution which provide the capability to:
 - (a) Maintain a safe navigational watch in accordance with Regulation 11/1 of the 1978 STCW Convention and also maintain general surveillance of the ship;
 - (b) Moor and unmoor the ship effectively and safely;
 - (c) Operate all watertight closing arrangements and maintain them in effective condition and also deploy a competent damage control party;
 - (d) Operate all on board fire equipment and life-saving appliances, carry out such maintenance of this equipment as is required to be done at sea, and muster and disembark passengers, non-essential personnel and other crew members;
 - (e) Manage the safety functions of the ship when employed in a stationary or near-stationary mode at sea;
 - (f) Maintain a safe engineering watch at sea in accordance with Regulation 111/1 of the 1978 STCW Convention and

also maintain general surveillance of spaces containing main propulsion or auxiliary machinery;

(g) Operate and maintain in a safe condition the main propulsion and auxiliary machinery to enable the ship to overcome the foreseeable perils of the voyage;

(h) Maintain the safety arrangements and the cleanliness of all accessible spaces to minimize the risk of fire;

(i) provide for medical care on board ship;

4. RECOMMENDS ALSO that , in applying such principle , Administrations take proper account of the existing ILO, IMCO, ITU and WHO instruments in force deal with:

(a) Training of seafarers;

(b) Certification of seafarers;

(c) Watchkeeping;

(d) Hour of work and rest;

(e) Occupational health and hygiene;

(f) Crew accommodation;

5. RECOMMENDS FURTHER that the following on-board functions, when applicable, should be taken into account;

(a) On-going training requirements for all personnel including the operation and use of fire-fighting, emergency and life-saving equipment and watertight closing arrangements;

(b) Specialized training requirements for particular types of ships, e.g. oil, chemical and liquefied gas tankers;

(c) Encouragement of the carriage of entrant seafarers to allow them to gain the training and experience required by the 1978 STCW Convention;

(d) Proper provision of food;

(e) Need to undertake emergency duties and responsibilities;

6. INVITES the Maritime safety committee to keep this resolution under review.

ANNEX 1

CONTENTS OF MINIMUM SAFE MANNING DOCUMENT

The following information should be stated in the document, in whatever form, which is issued by the Administration specifying minimum safe manning. If the language used is not English the information given should include a translation into English:

.1 a clear statement of the ship's name, its port of registry and its distinctive number or letters;

.2 a table showing the numbers and grades of the personnel required to be carried, together with any special conditions or other remarks;

.3 a formal statement by the Administration that, having regard to the principles and guidelines set out in this resolution and in Annex

2, the ship named in the document is considered to be safety manned if, whenever it proceeds to sea, it carries not less than the numbers and grades of personnel shown in the document, subject to any special conditions stated therein;

.4 a statement as to any limitations on the validity of the document by reference to particulars of the individual ship and the nature of service upon which it is engaged;

.5 the date of issue and any expiry date of the document together with a signature for and the seal of the Administration.

ANNEX 2

GUIDELINES FOR THE APPLICATION OF PRINCIPLES OF SAFE MANNING

1. INTRODUCTION

1.1 These Guidelines should be used in applying the basic principles of safe manning to ensure the safe operation of ships covered by Article III of the 1978 STCW Convention. This application may differ depending upon such factors as:

- .1 voyage description including trade or trades in which the ship is involved, length and nature of voyage, and waters;
- .2 number, size (kW) and type of main propulsion units and auxiliaries;
- .3 size of ship;
- .4 construction and technical equipment of ship.

1.2 These Guidelines are applicable only to masters and to officers and ratings in the deck and engine departments.*

* The mandatory requirements for the carriage of radio officers and radio telephone operators are contained in the SOLAS Conventions and the ITU Radio Regulations.

1.3 In applying these Guidelines an Administration should bear in mind that there should be a sufficient number of qualified personnel to meet peak work-load situations and conditions with due regard to the number of hours of shipboard duties and rest periods that may be assigned to a seafarer.

1.4 An Administration may retain or adopt arrangements which differ from the provisions herein recommended and which are especially adapted to technical developments and to special types of ships and trades. However, at all times the Administration should satisfy itself that the detailed manning arrangements ensure a degree of safety at least equivalent to that established by these guidelines.

2. BRIDGE WATCHKEEPING

Principle: The capability to maintain a safe navigational watch in accordance with Regulation II/1 of the 1978 STCW Convention and also to maintain general surveillance of the ship.

2.1 In addition to navigational and collision avoidance duties, the officer in charge of the navigational watch who is in effective control of the ship should exercise general surveillance over the ship and should take all possible precautions to avoid pollution of the marine environment. This surveillance will include, for example, the investigation of evidence of fire and unusual noises, security of cargo, general safety of crew members when working in exposed locations, the general watertight integrity of the ship and action in the event of man overboard.

2.2 The bridge watch should consist of at least one officer qualified to take charge of a navigational watch and at least one qualified or experienced seaman provided that:

- .1 the watch complies with the requirements of Regulation II/1 of the 1978 STCW Convention, particularly paragraphs 4 and 9;
- .2 when an automatic pilot is used, the helmsman may be released for other duties subject to the provisions of Regulation 19, Chapter V of the 1974 SOLAS Convention;
- .3 except in ships of limited size the provision of qualified deck officers should be such that it is not necessary for the master to keep regular watches;

.4 except in ships of limited size a three watch system should be adopted.

2.3 Where the bridge watch consists of one officer and one seaman, there should be the capability to provide further assistance at any time if the officer of the watch requires additional help. Such assistance should be readily available and fit for duty.

3. MOORING AND UNMOORING

Principle: The capability to moor and unmoor the ship effectively and safely.

3.1 The number of persons required for mooring a ship varies from very few, in respect of a ship fitted with sophisticated mooring equipment, to a large number in ships where it is necessary to manhandle ropes and wires.

3.2 At each end of the ship there should be sufficient persons to enable them to accept and effectively secure a tug and to send away, tension and secure lines and backsprings. Any necessary operations should be capable of being performed at bow and stern simultaneously. All other moorings required are solely a function of time and not of additional manpower.

3.3 Where a ship is regularly trading to a port where the mooring operation is known to be particularly exacting in terms of manpower, suitable provision of extra personnel should be made.

3.4 Details of any operations in which a ship is required to adopt a sophisticated mooring pattern involving the use of anchors should be clearly established. It will then be possible to identify simultaneous operations and enable adequate manpower to be provided for the peak workload.

3.5 If a ship is required to moor to another when both are underway, as in the case of some lightening operations, the workload involved should be analyzed and manpower provided for the peak workload condition.

3.6 In cases where a number of variations of mooring procedures are required to be performed, or where any unusual or onerous operations may be contemplated, each should be evaluated in term of the manpower necessary for its safe accomplishment.

4. WATERTIGHT INTEGRITY

Principle: The capability to operate all watertight closing arrangements and maintain them in effective condition and also to deploy a competent damage control party.

4.1 Assessment should commence with an examination of the ship's plans to identify the areas where the watertight integrity of the ship is effected by means of closing appliances.

4.2 The demands of each closing appliance or system of closing appliances should be evaluated in terms of the physical workload required for its operation during an emergency or with the onset of heavy weather.

4.3 A damage control party composed of assigned personnel with appropriate skills should be available to respond to emergencies involving damage or loss of watertight integrity.

5. SAFETY EQUIPMENT, MUSTERING AND DISEMBARKATION

Principle: The capability to operate all on-board fire equipment and life-saving appliances, to carry out such maintenance of this equipment as is required to be done at sea, and to muster and disembark passengers, non-essential personnel and other crew members.

5.1 The application of this principle varies in accordance with the diversity and range of equipment involved. The manpower requirement can be decided only by considering the workload involved in a particular ship.

5.2 Each ship should have an emergency organization which will include the allocation of personnel for fire parties, boat preparation parties and man overboard emergencies. A list of duties should be posted on board and the crew exercised in emergency drills in accordance with the requirements of the 1974 SOLAS Convention.

5.3 In the case of ships carrying a large number of passengers in proportion to crew, the manpower required is usually dictated by emergency situations where passengers need to be mustered and disembarked in an orderly manner. This is dependent upon the internal arrangement of the ship, the equipment fitted, and the maximum

number of persons involved. The most demanding phase in regard to manpower requirements is normally either the initial emergency phase or the abandon ship phase. Both phases should be carefully considered.

5.4 The master and all crew members have a duty to assist in any emergency affecting the ship or in rendering assistance to persons on other ships in distress.

6. STATIONARY OR NEAR-STATIONARY SHIPS

Principle: The capability to manage the safety functions of the ship when employed in a stationary or near-stationary mode at sea.

6.1 At Present such ships are mainly concerned with offshore exploration and development activities where by the nature of their operations they may carry a large number of specialized personnel with limited knowledge of the maritime environment. It is important that such ships carry a nucleus of adequately trained marine crew to instruct the specialized personnel in the use of safety equipment and evacuation procedures and to assist in the event of an emergency.

6.2 Support services for specialized personnel and their particular requirements should be so arranged as to avoid making demands upon the marine crew, which are unrelated to safety.

6.3 All personnel carried on board should be organized and practised in the actions to be taken in typical emergency situations. Some of these emergency situations will involve their specialist activities.

7. ENGINEERING WATCHKEEPING

Principle: The capability to maintain a safe engineering watch at sea in accordance with Regulation III/1 of the 1978 STCW Convention and also to maintain general surveillance of spaces containing main propulsion and auxiliary machinery.

7.1 The designated duty engineer officer is in effective charge of the engineering watch and should exercise general surveillance over the main propulsion machinery, essential ship's equipment and systems necessary for the safe operation of the ship's main plant and auxiliary machinery, and avoidance of pollution of the marine environment.

7.2 The engineering watch should consist of not less than one duly qualified engineer officer and may include appropriate engine-room ratings; it should conform with the requirements of Regulation III/1 of the 1978 STCW Convention. In designating the number of personnel assigned to engineering watches, account should be taken of the following:

.1 the number, size (kW) and type of the main propulsion and auxiliary units over which surveillance is to be maintained and the number of machinery spaces containing these units;

.2 the adequacy of internal communication;

.3 except in ships of limited propulsion power the provision of qualified engineer officers should be such that it is not necessary for the chief engineer to keep regular watches;

.4 except in ships of limited propulsion power a three watch system should be adopted.

Watch arrangements on ships permitted to operate with a reduced manning level based upon automated or periodically unattended operation should be consistent with the approval permitting such operation.

7.3 The designated duty engineer officer or other engine room personnel should not be required to keep a watch in an engine room alone or enter the main machinery spaces alone, unless their safety can be confirmed to the navigating bridge at frequent intervals, either by means of a monitoring system or other equivalent method acceptable to the Administration.

8 OPERATION AND MAINTENANCE OF MACHINERY

Principle: The capability to operate the main propulsion and auxiliary machinery and maintain it in a safe condition to enable the ship to overcome the foreseeable perils of the voyage.

8.1 There should be a sufficient number of qualified personnel to:

.1 operate the main propulsion machinery, essential ship's equipment and systems necessary for the safe operation of the ship's main plant and auxiliary machinery and to carry out routine maintenance of such machinery, equipment and systems;

.2 meet the possible need to continue the safe operation of the ship for a limited period on a manually operated basis, in the event of an automation or instrumentation failure.

9. SAFETY ARRANGEMENTS IN MACHINERY SPACES

Principle: The capability to maintain the safety arrangements and the cleanliness of machinery spaces to minimize the risk of fire.

9.1 There should be a sufficient number of designated personnel available to ensure adequate cleanliness of machinery spaces.

9.2 Manning systems may exist whereby crew members, who are not permanently assigned to the engine room complement, are given training in certain engine room duties and work in the engine room for specified limited periods.

9.3 Such maintenance as is required to be done at sea should be carried out on engine room fire fighting, fire detection and fire prevention equipment.

Title	Res / Assembly / Res. A.893(21)
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INTERNATIONAL MARITIME ORGANIZATION

RESOLUTION A.893(21)

adopted on 25 November 1999

GUIDELINES FOR VOYAGE PLANNING

(Link: STCW Code section A-VIII/2, part 2)

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO section A-VIII/2, Part 2 (Voyage planning) of the Seafarers' Training, Certification and Watchkeeping Code,

RECALLING FURTHER the essential requirements contained in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers and the International Convention for the Safety of Life at Sea concerning voyage planning, including those relating to officers and crew, shipborne equipment, and safety management systems,

RECOGNIZING the essential importance for safety of life at sea, safety of navigation and protection of the marine environment of a well planned voyage, and therefore the need to update the 1978 Guidance on voyage planning issued as SN/Circ.92,

NOTING the request of the Assembly in resolution A.790(19) that the Maritime Safety Committee consider the issue of voyage planning in conjunction with its review of the Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes in Flasks on Board Ships (INF Code), and the Committee's decision that consideration of the issue of voyage planning should not be restricted to vessels carrying materials subject to the INF Code but should apply to all ships engaged on international voyages,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Safety of Navigation at its forty-fifth session:

1. ADOPTS the Guidelines for voyage planning set out in the Annex to the present resolution;
2. INVITES Governments to bring the annexed Guidelines to the attention of masters of vessels flying their countries' flag, shipowners, ship operators, shipping companies, maritime pilots, training institutions and all other parties concerned, for information and action as appropriate;
3. REQUESTS the Maritime Safety Committee to keep the said Guidelines under review and to amend them as appropriate.

ANNEX

DRAFT GUIDELINES FOR VOYAGE PLANNING

1 Objectives

1.1 The development of a plan for voyage or passage, as well as the close and continuous monitoring of the vessel's progress and position during the execution of such a plan, are of essential importance for safety of life at sea, safety and efficiency of navigation and protection of the marine environment.

1.2 The need for voyage and passage planning applies to all vessels. There are several factors that may impede the safe navigation of all vessels and additional factors that may impede the navigation of large vessels or vessels carrying hazardous cargoes. These factors will need to be taken into account in the preparation of the plan and in the subsequent monitoring of the execution of the plan.

1.3 Voyage and passage planning includes appraisal, i.e. gathering all information relevant to the contemplated voyage or passage; detailed planning of the whole voyage or passage from berth to berth, including those areas necessitating the presence of a pilot; execution of the plan; and the monitoring of the progress of the vessel in the implementation of the plan. These components of voyage/passage planning are analysed below.

2 Appraisal

2.1 All information relevant to the contemplated voyage or passage should be considered. The following items should be taken into account in voyage and passage planning:

- .1 the condition and state of the vessel, its stability, and its equipment; any operational limitations; its permissible draught at sea in fairways and in ports; its manoeuvring data, including any restrictions;
- .2 any special characteristics of the cargo (especially if hazardous), and its distribution, stowage and securing on board the vessel;
- .3 the provision of a competent and well-rested crew to undertake the voyage or passage;
- .4 requirements for up-to-date certificates and documents concerning the vessel, its equipment, crew, passengers or cargo;
- .5 appropriate scale, accurate and up-to-date charts to be used for the intended voyage or passage, as well as any relevant permanent or temporary notices to mariners and existing radio navigational warnings;
- .6 accurate and up-to-date sailing directions, lists of lights and lists of radio aids to navigation; and
- .7 any relevant up-to-date additional information, including:
 - .1 mariners' routing guides and passage planning charts, published by competent authorities;
 - .2 current and tidal atlases and tide tables;
 - .3 climatological, hydrographical, and oceanographic data as well as other appropriate meteorological information;
 - .4 availability of services for weather routing (such as that contained in Volume D of the World Meteorological Organization's Publication No. 9);
 - .5 existing ships' routing and reporting systems, vessel traffic services, and marine environmental protection measures;
 - .6 volume of traffic likely to be encountered throughout the voyage or passage;
 - .7 if a pilot is to be used, information relating to pilotage and embarkation and disembarkation including the exchange of information between master and pilot;
 - .8 available port information, including information pertaining to the availability of shore-based emergency response arrangements and equipment; and
 - .9 any additional items pertinent to the type of the vessel or its cargo, the particular areas the vessel will traverse, and the type of voyage or passage to be undertaken.

2.2 On the basis of the above information, an overall appraisal of the intended voyage or passage should be made. This appraisal should provide a clear indication of all areas of danger; those areas where it will be possible to navigate safely, including any existing routing or reporting systems and vessel traffic services; and any areas where marine environmental protection considerations apply.

3 Planning

3.1 On the basis of the fullest possible appraisal, a detailed voyage or passage plan should be prepared which should cover the entire voyage or passage from berth to berth, including those areas where the services of a pilot will be used.

3.2 The detailed voyage or passage plan should include the following factors:

.1 the plotting of the intended route or track of the voyage or passage on appropriate scale charts: the true direction of the planned route or track should be indicated, as well as all areas of danger, existing ships' routing and reporting systems, vessel traffic services, and any areas where marine environmental protection considerations apply;

.2 the main elements to ensure safety of life at sea, safety and efficiency of navigation, and protection of the marine environment during the intended voyage or passage; such elements should include, but not be limited to:

.1 safe speed, having regard to the proximity of navigational hazards along the intended route or track, the manoeuvring characteristics of the vessel and its draught in relation to the available water depth;

.2 necessary speed alterations en route, e.g., where there may be limitations because of night passage, tidal restrictions, or allowance for the increase of draught due to squat and heel effect when turning;

.3 minimum clearance required under the keel in critical areas with restricted water depth;

.4 positions where a change in machinery status is required;

.5 course alteration points, taking into account the vessel's turning circle at the planned speed and any expected effect of tidal streams and currents;

.6 the method and frequency of position fixing, including primary and secondary options, and the indication of areas where accuracy of position fixing is critical and where maximum reliability must be obtained;

.7 use of ships' routing and reporting systems and vessel traffic services;

.8 considerations relating to the protection of the marine environment; and

.9 contingency plans for alternative action to place the vessel in deep water or proceed to a port of refuge or safe anchorage in the event of any emergency necessitating abandonment of the plan, taking into account existing shore-based emergency response arrangements and equipment and the nature of the cargo and of the emergency itself.

3.3 The details of the voyage or passage plan should be clearly marked and recorded, as appropriate, on charts and in a voyage plan notebook or computer disk.

3.4 Each voyage or passage plan as well as the details of the plan, should be approved by the ships' master prior to the commencement of the voyage or passage.

4 Execution

4.1 Having finalized the voyage or passage plan, as soon as time of departure and estimated time of arrival can be determined with reasonable accuracy, the voyage or passage should be executed in accordance with the plan or any changes made thereto.

4.2 Factors which should be taken into account when executing the plan, or deciding on any departure therefrom include:

.1 the reliability and condition of the vessel's navigational equipment;

.2 estimated times of arrival at critical points for tide heights and flow;

.3 meteorological conditions, (particularly in areas known to be affected by frequent periods of low visibility) as well as weather routing information;

.4 daytime versus night-time passing of danger points, and any effect this may have on position fixing accuracy; and

.5 traffic conditions, especially at navigational focal points.

4.3 It is important for the master to consider whether any particular circumstance, such as the forecast of restricted visibility in an area where position fixing by visual means at a critical point is an essential feature of the voyage or passage plan, introduces an unacceptable hazard to the safe conduct of the passage; and thus whether that section of the passage should be attempted under the conditions prevailing or likely to prevail. The master should also consider at which specific points of the voyage or passage there may be a need to utilize additional deck or engine room personnel.

5 Monitoring

5.1 The plan should be available at all times on the bridge to allow officers of the navigational watch immediate access and reference to the details of the plan.

5.2 The progress of the vessel in accordance with the voyage and passage plan should be closely and continuously monitored. Any changes made to the plan should be made consistent with these Guidelines and clearly marked and recorded.

Title	CIRCULAR / MSC/Circ.867
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INTERNATIONAL MARITIME ORGANIZATION

OFFICER OF THE NAVIGATIONAL WATCH ACTING AS THE SOLE LOOK-OUT DURING PERIODS OF DARKNESS

1 The Maritime Safety Committee, at its sixty-ninth session (11-20 May 1998), recalled that a decision had been taken by a majority at its sixty-fifth session that trials conducted in accordance with MSC/Circ.566 (Provisional guidelines on the conduct of trials in which the officer of the navigational watch acts as the sole look-out in periods of darkness) should be discontinued. The Committee further recalled that this decision was implemented by means of a circular adopted at its sixty-sixth session (MSC/Circ.733) which called on Administrations authorizing trials to discontinue trials not later than 31 December 1997, and to submit the results of the trials to MSC 69 for its determination. At its sixty-ninth session, the Committee considered the results of trials which were submitted by a number of Administrations.

2 The Committee recognized that some Administrations were convinced by the trials that the solo watchkeeping arrangements provided at least the same degree of safety and pollution prevention as provided by traditional watchkeeping arrangements with a separate look-out forming part of the watch. Nevertheless, the majority of the Committee remained concerned that solo watchkeeping in periods of darkness would have a potentially adverse impact on safety of navigation and protection of the marine environment.

3 In view of this concern, the Committee, at its sixty-ninth session (MSC 69/22, paragraph 21.32):

.1 determined, pursuant to paragraph 8.4 of regulation I/13 of the STCW Convention, that it was not necessary or appropriate to amend the watchkeeping provisions of the STCW Convention; and

.2 called upon Administrations which have authorized ships to participate in trials, or which have authorized ships to continue the practice of solo watchkeeping in periods of darkness indefinitely, to cancel or discontinue such authorizations.

Title	CIRCULAR / MSC/Circ.566
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PROVISIONAL GUIDELINES ON THE CONDUCT OF TRIALS IN WHICH THE OFFICER OF THE NAVIGATIONAL WATCH ACTS AS THE SOLE LOOK-OUT IN PERIODS OF DARKNESS

1 The Maritime Safety Committee at its fifty-ninth session (13 to 24 May 1991) approved provisional Guidelines for the conduct of trials in which the officer of the navigational watch acts as the sole look-out in periods of darkness (MSC 59/33) paragraph 11.23).

2 As requested by the Committee, the attached provisional Guidelines are brought to the attention of Member Governments.

3 The provisional Guidelines should be considered as guidance for uniform application and not as an authorization or as a basis for equivalent arrangements for unrestricted application.

4 With respect to passenger ships and ships carrying oil, gas and chemicals in bulk, the Committee recommends that Administrations defer participation by such vessels in trials under the provisional Guidelines pending consideration by the Committee of the results of trials with ships engaged in other types of service.

5 Trials authorized in accordance with the provisional Guidelines should not be conducted in waters subject to the jurisdiction of a Government which has informed the Organization of its objections to such trials.

6 When ships of less than 1,600 grt cannot comply with the guidelines, Administrations should consider arrangements that provide a level of safety that is at least as effective as that prescribed by the provisional Guidelines.

7 Reports of the results of trials conducted in accordance with the provisional Guidelines, including preliminary progress reports, may be submitted directly to the Sub-Committee on Safety of Navigation and to the Sub-Committee on Standards of Training and Watchkeeping for their information. Such reports should be submitted in sufficient time to ensure they are taken into consideration when the above sub-committees are scheduled to evaluate the trials and consider the need for revision of the provisional Guidelines.

ANNEX

DRAFT PROVISIONAL GUIDELINES FOR CONDUCTING TRIALS IN WHICH THE OFFICER OF THE NAVIGATIONAL WATCH ACTS AS THE SOLE LOOK-OUT IN PERIODS OF DARKNESS

Purposes

1 To collect information which will facilitate deliberations by the Organization on the practice of allowing the officer of the navigational watch to act as sole look-out in periods of darkness.

2 To determine whether and under what conditions the officer of the navigational watch can safely perform the duties of the look-out in periods of darkness.

3 To evaluate such matters as what constitutes:

- an acceptable bridge layout;
- an appropriate level of control equipment and instrumentation;
- safe and healthy operational procedures.

Role of Administrations

4 To authorize ships individually to participate in trials.

5 To monitor trials in accordance with these provisional Guidelines.

6 To take into consideration all relevant international instruments in authorizing trials.

7 To issue an appropriate safe manning document to each ship participating in trials regardless of size.

8 To inform the Organization when trials are to be carried out and to report the results of such trials to the Organization. Operational and environmental conditions which should exist before trials are conducted

9 The authorization for conducting trials with the officer of the watch as sole look-out in periods of darkness is based on the condition that all the basic principles as specified in regulation II/1 (notwithstanding the words "in daylight" in paragraph 9(b) and regulation III/1 of the 1978 STCW Convention will be observed and are being taken into account

* Administrations should ensure that all persons participating in trials are fully familiar with all relevant provisions of the 1978 STCW Convention and these provisional Guidelines.

Bridge layout and instrumentation

10 The bridge design, i.e. bridge configuration, arrangement of consoles and equipment location, should enable the officer of the watch to perform navigational duties and other functions allocated to the bridge as well as maintain a proper look-out from a convenient position on the bridge, hereafter referred to as a "workstation".

11 A workstation for navigation and traffic surveillance/manoeuvring should be arranged to enable efficient operation by one person under normal operating conditions. All relevant instrumentation should be easily accessible from the workstation.

12 For the purpose of performing duties related to navigation, traffic surveillance and manoeuvring, the field of vision from a workstation should be such as to enable observation of all objects which may affect safe conning of the ship. The field of vision from a workstation should be in accordance with the "Guidelines on navigation bridge visibility", as specified in MSC/Circ.403 * as it applies to new ships.

* This reference to be replaced when the draft resolution on navigational bridge visibility and functions (NAV 36/25, annex 8) has been adopted by the Assembly.

13 The instrumentation at the workstation for navigation and traffic surveillance /manoeuvring should be arranged to enable the officer of the watch:

.1 to determine and plot the ship's position, course, track and speed;

.2 to analyse the traffic situation;

.3 to decide on collision avoidance manoeuvres;

.4 to alter course;

.5 to change speed;

.6 to effect internal and external communications related to navigation and manoeuvring as well as VHF radiocommunications;

.7 to give sound signals;

.8 to hear sound signals;

.9 to monitor the ship's course, speed and track, propeller revolutions (pitch), rudder angle and the depth of water; and

.10 to record navigational data.

14 The lighting required on the bridge should be designed so as not to impair the night vision of the officer on watch.

15 Ships participating in trials should be equipped in accordance with relevant international instruments, but should in any case be equipped with the following:

- .1 bridge safety system as described in paragraphs 18 to 24 and 28 to 31;
- .2 automatic radar plotting aids (ARPA);
- .3 electronic position-fixing systems;
- .4 gyro compass systems;
- .5 automatic steering systems;
- .6 speed log systems;
- .7 echo sounding systems;
- .8 whistle control systems;
- .9 internal communication systems; and
- .10 relevant external communication Systems.

16 All of the above equipment should be functioning properly during any trial.

17 Administrations should consider the need for and benefit of the following equipment when authorizing ships to participate in trials:

- .1 automatic graphical position display;
- .2 an appliance for recording VHF calls;
- .3 a paging system and means of acknowledgement;
- .4 a rasterscan daylight-viewing radar;
- .5 a NAVTEX or EGC receiver, as appropriate for automatic reception; and
- .6 a sound reception system.

Monitoring systems

Bridge safety system

18 A system is needed to indicate that an alert officer of the navigational watch is present on the bridge.

19 Any system used for verification of the officer of the navigational watch alertness should not cause undue interference with the performance of bridge functions.

20 The system should comply with technical requirements laid down by a competent national authority.

21 The system should be so designed and arranged that it could not be operated in an unauthorized manner.

22 Any system used for periodic verification of the officer of the navigational watch alertness should be adjustable up to 12- minute intervals and constructed, fitted and arranged so that only the ship's master has access to the component for setting the appropriate intervals.

23 Any authorized system should provide for the acknowledgement by the officer of the navigational watch at the workstation and other appropriate locations in the bridge from where a proper look-out may be kept.

24 Such a system should be connected to an alarm transfer system described in paragraphs 28 to 31.

Other monitoring alarm systems

25 Administrations should consider the need for and benefits of the following equipment and their connection to the alarm transfer system as described in paragraphs 28 to 31.

Collision warning system

26 In order to safeguard against the risk of collision, a collision warning system should enable detection of floating objects which may come into a collision course and release an alarm in accordance with procedures considered appropriate for the waters to be navigated.

Grounding and off-track warning system

27 In order to safeguard against the risk of grounding, a position-fixing system or other system should release an off-track alarm when the ship's position is at a given distance from the planned track.

Alarm transfer system

28 The system should immediately warn the master and the appointed back-up navigator when a proper acknowledgement has not been made.

29 Proper acknowledgement of any alarm in the alarm transfer system should automatically reset the interval checking system. The system should have a device to give the officer of the navigational watch advance warning of the expiry of the time interval.

30 Acknowledgement of alarms should only be possible on the bridge.

31 The alarm transfer system should be continuously powered and shall have an automatic change over to a stand-by power supply in case of loss of normal power supply.

32 The requirements of paragraphs 18 to 32 are not intended to prevent Administrations from authorising trials with any technical systems that adequately verify the alertness of the officer of the navigational watch at intervals up to 12 minutes.

Qualifications and additional responsibilities of the officer of the navigational watch

33 Before acting as sole look-out in a trial, the officer of the navigational watch should:

- .1 have at least 12 months of seagoing service as a qualified officer of navigational watch on board a ship; and
- .2 be familiar with all equipment on the bridge and with all guidelines applying to the trial, and should have demonstrated such familiarity to the master.

34 The officer of the navigational watch should also be aware of the following:

- .1 who is on call if assistance is needed; how assistance can be called most expeditiously; and the time required for assistance to arrive on the bridge;
- .2 what change in circumstances requires the master to be notified or assistance to be requested;
- .3 that the trial should be suspended whenever it cannot be continued safely in the officer's judgement; when the operational conditions are outside those under which the trial was authorized to take place; or when the workload exceeds the officer's ability to accomplish all required tasks properly; and

.4 a trial should not be conducted or continued when the alarm transfer system is powered by a stand-by power supply.

35 The person designated as officer of the navigational watch during a trial should, before assuming the watch, evaluate his physical and mental condition and be satisfied that he is fully rested and fit for duty and should also determine that all essential bridge instrumentation is functioning properly, and that the bridge safety system is in operation.

Responsibilities of the ship operators and master

36 The company operating ships engaged in trials should ensure that the trials are conducted in accordance with conditions established by the Administration, and that adequate instructions are provided to the master. The master should ensure the proper conduct of the trials, including the circumstances under which the trials must be suspended to ensure that safety is not compromised and that these instructions are met, taking into account prevailing operational circumstances.

37 The master should ensure that the officer of the navigational watch should only continue to act as the sole look-out when in that officer's judgement the workload is well within his capacity to maintain a proper look-out and full control of the prevailing situation.

38 The master should designate individuals who are to provide assistance when needed by the officer of the navigational watch acting as sole look-out during a trial, and further should inform those concerned in writing.

39 Before permitting the officer of the navigational watch to act as sole look-out in a trial, the master should confirm that the officer is qualified, as described in paragraphs 33 to 35, and is not impaired by fatigue.

40 In setting the alarm described in paragraphs 18 to 24, the master should take full account of the ship's actual course and speed over the ground and the immediate consequences of allowing the ship to advance along its trackline in the absence of an alert officer. The master should, in setting the interval for the alarm, fully assess the vessel's anticipated route and identify any foreseeable hazards to navigation or restrictions on manoeuvrability.

41 The company operating the ship should, in co-operation with the master, report the results of the trials to the Administration.

Reports of trial results

42 The Administration should establish systems and procedures for registration of operational conditions and the ability of the officer of the navigational watch to maintain a proper look-out while performing other bridge duties during trials. The report of trial results should be submitted to the Organization in the format attached in the appendix.

Appendix

Reporting Form

under the provisions of paragraph 42 of the Guidelines

SHIP'S DATA SHEET

to be filled in for each vessel participating in trials:

Name Call sign

Type Trade area

Flag

Tonnage grt Length o.a. m

Speed kn Breadth m

Number of crew Summer draught m

No. of officers

certificated for

navigational duties

Bridge instrumentation

	YES	NO
- automatic radar plotting aid (ARPA)	<input type="checkbox"/>	<input type="checkbox"/>
- electronic position-fixing system	<input type="checkbox"/>	<input type="checkbox"/>
- gyro compass systems	<input type="checkbox"/>	<input type="checkbox"/>
- automatic steering system	<input type="checkbox"/>	<input type="checkbox"/>
- speed log system	<input type="checkbox"/>	<input type="checkbox"/>
- echo sounding system	<input type="checkbox"/>	<input type="checkbox"/>
- whistle control system	<input type="checkbox"/>	<input type="checkbox"/>
- internal communication system	<input type="checkbox"/>	<input type="checkbox"/>
- external communication system	<input type="checkbox"/>	<input type="checkbox"/>
- watch alarm system with alarm transfer system	<input type="checkbox"/>	<input type="checkbox"/>
- collision warning system without alarm transfer system	<input type="checkbox"/>	<input type="checkbox"/>
- collision warning system with alarm transfer system	<input type="checkbox"/>	<input type="checkbox"/>
- grounding and off-track warning system with alarm transfer system	<input type="checkbox"/>	<input type="checkbox"/>
- grounding and off-track warning system without alarm transfer system	<input type="checkbox"/>	<input type="checkbox"/>
- automatic graphic position display	<input type="checkbox"/>	<input type="checkbox"/>
- appliance for recording VHF calls	<input type="checkbox"/>	<input type="checkbox"/>
- paging system and means of acknowledgement	<input type="checkbox"/>	<input type="checkbox"/>
- rasterscan radar display	<input type="checkbox"/>	<input type="checkbox"/>
- NAVTEX or EGC receiver	<input type="checkbox"/>	<input type="checkbox"/>
- sound reception system	<input type="checkbox"/>	<input type="checkbox"/>
- _____	<input type="checkbox"/>	<input type="checkbox"/>
- _____	<input type="checkbox"/>	<input type="checkbox"/>

Bridge design: illustration / plan attached Description of bridge safety system:

- Initial signal emitted by alarm:

light

sound

both

- Intervals between required acknowledgements:

maximum interval set during trials minutes

minimum interval set during trials minutes

- Period before alarm signal is transferred to other locations on ship: seconds

- Type and location of acknowledgement devices

- Locations on ship where unacknowledged alarm signal is transferred:

- master's quarters

- back-up navigator's quarters

- ship's offices

- messrooms, day rooms, relevant public areas

- portable device carried by the master

- _____

- Would the ship's general alarm automatically be sounded if the transfer alarm is not acknowledged?

YES

NO

- The back-up navigator is expected to arrive on the bridge in how many minutes after the transfer alarm is activated?

- When ships of less than 1,600 grt participate in trials and cannot comply with the provisional Guidelines, Administrations should indicate what guidelines could not be complied with and describe what alternative arrangements were adopted to provide a level of safety that is at least as effective as that prescribed in the guidelines.

1 General information

1.1 Reporting country:

1.2 Reporting period:

1.3 Ships participating in the trials and experiments:

	Watch hours under trial conditions	Nautical miles under trial conditions

1.4 What was the watchkeeping schedule in operation during the trials?

1.5 Were independent observers on board the ship during the trials?

1.6 Licence and experience of individuals who participated in trials as officers of the navigational watch:

1.6.1 Licence:

Master/Chief mate of ships of 1,600 grt or more (number)

Master/Chief mate of ship between 200 and 1,600 grt. (number)

Officer of the navigational watch of ships 200 grt or more (number)

1.6.2 Experience as qualified officer of the navigational watch

- between 12 and 24 months (number)

- between 24 and 36 months (number)

- between 36 and 60 months (number)

- over 5 years (number)

1.6.3 Experience on particular ship involved in trial

- less than one month (number)

- between 1 and 6 months (number)

- between 6 and 12 months (number)

- over 1 year (number)

1.7 What special training, if any, was required to ensure the officer of the navigational watch is fully capable of acting as the sole look-out in periods of darkness?

1.8 How often has the one-man watchkeeping at night been terminated for the following reasons (see paragraph 36 of the Guidelines):

- because of:

- change in weather

- reduced visibility

- increased traffic density

- danger to navigation

- equipment failure

- illness

- fatigue

- others (explain)

1.9 How often has the alarm transfer system been released (see paragraph 24 of the Guidelines)?

1.9.1 If any, explain reasons:

- the officer was occupied with other essential duties relating to navigation

- other

1.9.2 If any, how often did this alarm result in termination of the trial?

1.10 Are there any reports on violations of traffic regulations of a ship conducting one-man watchkeeping trials and experiments at night?

Yes/No

If yes, how many?

1.11 Did any navigational casualty occur to a ship conducting one-man watchkeeping trials in periods of darkness?

Yes /No

If yes, how many?

Type of incident:

1.12 Which other technical equipment or systems have been adopted according to paragraph 32 of the Guidelines?

1.13 Was the opportunity provided for the master and the officers involved in the trial to submit comments to the Administration on a confidential basis?

Yes /No

2 Operational and environmental conditions

2.1 What is the national ship safety authority's view of the scope of operational and environmental conditions imposed by paragraph 9 of the Guidelines?

too large adequate too narrow

2.2 The following amendments are proposed:

3 Provisions for bridge design and instrumentation

3.1 What is the national ship safety authority's view of the scope of bridge design and instrumentation as prescribed by paragraphs 10 to 17 of the Guidelines?

too large adequate too narrow

3.2 The following amendments are proposed:

4 Provisions for monitoring Systems

4.1 What is the national ship safety authority's view of the scope of the provisions for monitoring systems as prescribed by paragraphs 18 to 24 of the Guidelines?

too large adequate too narrow

4.2 The following amendments are proposed:

5 Duties of shipowner/ship operator and the master

5.1 What is the national ship safety authority's view of the scope of the duties of the shipowner/ship operator and the master as prescribed by paragraphs 36 to 41 of the Guidelines?

too large adequate too narrow

5.2 The following amendments are proposed:

6 Qualifications of the officer of the watch

6.1 What is the national ship safety authority's view of the scope of the qualifications of the officer of the watch as prescribed by paragraphs 33 to 35 of the Guidelines?

too large adequate too narrow

6.2 The following amendments are proposed:

7 Summary

7.1 The National Ship Safety Authority is invited to provide an assessment of the adequacy of these provisional guidelines on the basis of the experience gained from the trials so far.



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Ref. T2/4.1.5

STCW.7/Circ.14
24 May 2004

GUIDANCE FOR MASTERS ON KEEPING A SAFE ANCHOR WATCH

- 1 The Sub-Committee on Standards of Training and Watchkeeping, at its thirty-fifth session (26 to 30 January 2004), considered the requirements in section A-VIII of the STCW Code relating to watchkeeping requirements at anchor after seeking the advice of the NAV Sub-Committee as this was an operational matter.
- 2 The Sub-Committee, noting the advice issued by the NAV Sub-Committee, developed additional guidance for masters on keeping a safe anchor watch, set out at annex.
- 3 The Maritime Safety Committee, at its seventy-eighth session (12 to 21 May 2004), approved the circulation of this guidance for masters on keeping a safe anchor watch.
- 4 Member Governments are invited to bring the guidance to the attention of those concerned.

ANNEX

GUIDANCE FOR MASTERS ON KEEPING A SAFE ANCHOR WATCH

1 The master of every ship at an unsheltered anchorage, at an open roadstead or any other virtually "at sea" conditions in accordance with chapter VIII, section A-VIII/2, part 3-1, paragraph 51 of the STCW Code, is bound to ensure that watchkeeping arrangements are adequate for maintaining a safe watch at all times. A deck officer shall at all times maintain responsibility for a safe anchor watch.

2 In determining the watchkeeping arrangements, and commensurate with maintaining the ship's safety and security and the protection of the marine environment, the master shall take into account all pertinent circumstances and conditions such as:

- .1 maintaining a continuous state of vigilance by sight and hearing as well as by all other available means;
- .2 ship-to-ship and ship-to-shore communication requirements;
- .3 the prevailing weather, sea, ice and current conditions;
- .4 the need to continuously monitor the ship's position;
- .5 the nature, size and characteristics of anchorage;
- .6 traffic conditions;
- .7 situations which might affect the security of the ship;
- .8 loading and discharging operations;
- .9 the designation of stand-by crew members; and
- .10 the procedure to alert the master and maintain engine readiness.