

# BRIDGE STANDING ORDER

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## READING RECORD

The officers of the watch and quarter masters should read this Standing Order as soon as practicable after joined Vessel before taking over navigational watch keeping duties, and sign below when he understood fully.

If OOW or Q/M has any doubt or query, ask Master to clarify or make clear the doubt or query.

Rank	Date	Print Name	Signature
Master			
Chief Officer			
Second Officer			
Third Officer			
Able Seaman (A)			
Able Seaman (B)			
Able Seaman (C)			

## **1. GENERAL**

You, the Officer of the Watch (OOW), are Master's representative.

Your primary responsibility at all times is the SAFETY OF VESSEL.

You are responsible for ensuring that the planned passage is properly carried out during your watch.

You must at all times comply with the 1972 International Regulations for Preventing Collisions at Sea (COLREG); Regulation /1 (Basic Principles to be observed in Keeping a Navigational Watch) of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW Convention); All existing Local Regulation for the safety of navigation.

Our Safety of Navigation Manual and this Bridge Standing Order.

You should keep your watch on the bridge, in no circumstances should you leave the bridge until properly relieved.

You should ensure that an effective lookout is maintained at all times.

In a vessel with a separate chart room you may visit it, when essential, for a short period in order to carry out your navigational duties, but you should satisfy yourself that it is safe to do so and that a good lookout is being kept.

You continue to be responsible for the safety and navigation of Vessel despite the presence of Master on the bridge until such time that Master informs you specifically that Master has assumed the responsibility.

It is your duty to be aware of any work being carried out in the vicinity of the radar and radio aerials, and of sound signaling apparatus, so that the appropriate warnings can be given.

The use of warning notices to hang on equipment controls when such work is in progress is recommended.

## 2. KEEPING A GOOD WATCH

You are responsible for the maintenance of a continuous and alert watch, which is one of the most important considerations for avoidance of collisions, stranding and other casualties.

In order to keep an efficient watch you should ensure the following:

- 1) Proper look-out, in accordance with the Rule 5 of the International Regulations for Preventing Collisions at Sea (COLREG), should be kept at all times; an alert all-round visual and aural lookout to allow a full grasp of the current situation, including the presence of vessels and landmarks in the vicinity;
- 2) Close observation of the movements and bearing of approaching vessels;
- 3) Identification of vessel and shore lights;
- 4) Close monitoring that the course is being steered accurately and that wheel orders are correctly executed;
- 5) Observation of the radar and echo sounder displays;
- 6) Observation of changes in the weather, sea condition and especially the visibility;
- 7) Close watch of the VHF Radio and/or other measures through the watch in order to obtain timely Navigation Warning or Information related to safety of navigation.
- 8) Observation of changes in the ship's conditions carefully at all the time, such as ship's stability, trim, heel, all navigational equipment and/or fittings also including the uncommon atmosphere in the crew's quarter.
- 9) Prohibition of using any equipment (including MP3, Cell. Phone) may distract proper lookout.

Basic watch arrangements are as follows:

Watch Time	Officer	Rating
0001 ~ 0400	Second Officer	Quarter Master
1200 ~ 1600	(Name)	(Name)
0400 ~ 0800	Chief Officer	Quarter Master
1600 ~ 2000	(Name)	(Name)
0800 ~ 1200	Third Officer	Quarter Master
2000 ~ 2400	(Name)	(Name)

Additional watch keeping personnel should be posted at the bridge or where in the proper place on the deck in case of the following circumstances:

- 1) Restricted visibility;
- 2) Vessel proceeding in confined water such as narrow channels;
- 3) Heavy density of traffic;
- 4) Abnormal weather and sea condition.

Master instructs posting additional watch at the request of OOW or according to Master's judgment.

The OOW shall keep a safety margins considering company's UKC / Air draft policies.

- UKC Policy

Circimstance	Minimum UKC
Ocean Passage	20% of deepest draft
Fairway	15% of deepest draft
Within Port Limits	10% of deepest draft
Shallow Water	10% of deepest draft
Coastal or River	10% of deepest draft
Alongside at Berth	1.5% of the beam or 30cm, which is higher
Mooring at SBM / CBM	1.5% of the beam or 30cm, which is higher

- Minimum Overhead Clearance Policy

Circimstance	Minimum Overhead Clearance
Under Power Cable	Minimum 3 m
Under Bridge	Minimum 1 m

Where a government, port authority, or pilot association establishes mandatory or recommended minimum UKC, the master must ensure that, as a minimum, such UKC/Overhead Cleaance is maintained after taking into account the above factors.

### 3. MAIN ENGINES

You should bear in mind that the engines are at your disposal for assistance in maneuvering.

You should not hesitate to use the engines as required.

Notifications to the engine room.

You should notify the Engineer on Watch as follows:

- 1) \_\_\_\_\_ **Hours**      \_\_\_\_\_ **Minutes** before the end of sea passage for stand by engine.  
(Master should consult C/E about the time underlined and complete it.)
- 2) When necessary to reduce Vessel's speed due to weather and sea conditions including approaching poor visibility, traffic condition, and or in an emergency situation.
- 3) When Vessel is approaching to Ice Waters.
- 4) When Vessel is proceeding shallow water that might effect water intakes to the engine room.

You should be fully aware of the maneuvering characteristics of vessel, e.g. stopping distance, turning capability and etc..

You should pay particular attention to the following when using main Eng.:

- \* Control of revolutions ahead and astern;

You should be familiar with the operation of the engine/propeller mechanism and aware of any limitations or restriction such as the lowest and maximum revolutions, critical revolutions, time required to change from Ahead to Astern and vice versa.

You should be familiar with the actual mechanical procedures initiated by an unforeseeable variation in engine speed.

- Particular limitations of Engine

Limitations	Detail
Critical Revolution	
Lowest operable Revolution	
Others	

\* Master should fill the above blanks after consultation with C/E.

Condition and readiness

You should know the time taken to achieve both an emergency and a routine stop when she is proceeding with full speed in both '[Loaded](#)' and '[Ballast](#)' conditions.

- Necessary time to STOP ENGINE:

	Emergency Stop ( <a href="#">Crash astern</a> )	Routine Stop ( <a href="#">Ahead to Stop Eng.</a> )
<a href="#">Loaded Condition</a>	min.	min.
<a href="#">Ballast Condition</a>	min.	min.

\* Master should fill the above blanks after consultation with C/E.

#### **4. CHANGING THE WATCH**

If a maneuver or other action to avoid a hazard is being taken at the moment when OOW is about to be relieved, hand-over should be deferred until the action is completed.

You should not hand over the watch if you have any reason to believe that the relieving officer is in disable condition (e.g. Illness, Drink, Drug, Fatigue etc.). If in doubt, you should consult Master.

The relieving officer and watch keeping personnel should follow Company's Drug and Alcohol Policy in order to keep a good watch.

The relieving officer and watch keeping personnel should have a proper rest before taking over the watch to recover from fatigue so that they can perform their duties effectively and properly.

The relieving officer of the watch should confirm before taking over the watch that himself and members of his watch are fully capable of performing their duties, in particular, they should be adjusted to night vision or prevailing light condition. They should not take over the watch until they are found to be adjusted to the surrounding conditions.

When handing over the duties and responsibility between OOW, relieving officer shall confirmed and satisfied all items on the relevant checklist (FOM-04-F05), (FOM-W-32-A01 if ship equips ECDISs).

When handing over the duties and responsibility between OOW and Master, you should ensure that Master/OOW confirmed and satisfied all items on the relevant checklist (FOM-04-F10).

##### **Rounds on board:**

After handing over the watch, you should carry out rounds on board to check for fire, flooding, possible oil leaks or any other unusual circumstances. When complete rounds of vessel, the results should be recorded in logbook.

## 5. PERIODIC CHECKS OF NAVIGATIONAL EQUIPMENT

You should make regular checks to ensure that:

- 1) The helmsman or the automatic pilot is steering the correct course.
  - 2) The standard magnetic compass error is established at least once a watch.
  - 3) The standard magnetic and gyro compasses are compared frequently and repeaters synchronized.
  - 4) The automatic pilot is tested in the manual position at least once a watch.
  - 5) The navigation and signal lights and other navigational equipment are functioning properly.
  - 6) When Vessel is going to enter into or get underway on the navigable waters of the United States, the following equipment should be checked and recorded unless no more than 12 hours before entering or getting under way: (33 CFR, 164.25)
  - 7) Primary and secondary steering gear.
  - 8) All internal vessel control communication systems and vessel control alarms.
  - 9) Standby or emergency generator.
  - 10) Storage batteries for emergency lighting and power systems in vessel control and propulsion machinery spaces.
  - 11) Main propulsion machinery ahead and astern.
- \* See relevant check list (FOM-03-F01, FOM-04-F13)

A sample of entry into logbook for this inspection carried is,

ex. Conducted equipment tests required by 33 CFR, 164.25 (a)-(1), (2), (3), (4) & (5) and found them all normal.



## 6. USE OF ECDIS

The ECDIS is very useful for safe navigation however all officers are aware of that wrong setting of any parameters cause a critical accident. To avoid that, OOW shall be familiar with use of ECDIS according to ECDIS operation instruction by company and manufacturer's manual.

The ship's primary and secondary means of navigation are ECDIS. OOW should be familiar with its efficient use and entire passage plan required by passage planning procedure should be input into all ECDIS onboard (primary and secondary). Also, it should be confirmed that ENC chart, AIO and manual correction if applicable are up to date and applied on ECDIS.

The alarm parameters should be set and followed strictly as per ECDIS operational instruction as below (for details, it is referred in ECDIS operation instruction);

Alarm	Setting value
Safety Depth	Max. Draft + UKC + Squat
Safety Contour	Same value as Safety Depth above
Shallow Contour	Max. Draft
Deep Contour	More than two times of Max. Draft

The interval for checking ship's position on ECDIS and Paper chart should be set to prevent from danger but at least, it should be carried out as below;

Navigation Area	Check Interval
Ocean Navigation	Every 1 hour
Coastal Navigation	Every 15 mins.
Entering & Living port / Shallow water / Restricted & Pilotage water	Every 5 mins.

IMO requires the vessel to sail with 'standard mode' and more for display setting of ECDIS, in other words, layers of 'base' and 'standard' mode must not be removed (Especially 'Isolated danger symbol' layer must be displayed in any case). But the vessel should use 'other mode' to secure the safety of the vessel and If need, remove unnecessary information. Additionally, a poster which shows the present setting of layer shall be posted near the ECDIS monitor in order to be notified easily by all officers.

Data input into ECDIS from the gyro compass, speed log, echo sounder if fitted should be periodically monitored to ensure accuracy.

## 7. HELMSMAN / AUTOMATIC PILOT

You should bear in mind the need to station the helmsman and change over the steering to manual control in good time to allow any potentially hazardous situation to be dealt with in a safe manner.

The steering mode should be changed over to Manual Steering in the following situations:

- 1) Whenever Master's instructions specify Manual Steering;
- 2) At all planned navigation alterations of course;
- 3) For all traffic avoidance maneuvers;
- 4) Whenever the depth of water is not sufficient for the automatic steering;
- 5) During passing across the strong stream in the narrow channel;
- 6) During under Pilotage except the case that pilot allows to steer by automatic steering;
- 7) For any emergency situations.

The changeover from automatic to manual steering and vice versa should be made in good time to cope with a need by yourself or at your order under your supervision.

Manual steering shall not be done by OOW except in an emergency situation.

Under automatic steering it is highly dangerous to allow a situation where the OOW is alone without assistance and has to break the continuity of the lookout in order to take emergency action. The helmsman must be stationed whenever any hazard is expected.

The duties of the look-out and helmsman are separate. The helmsman shall not be considered to be the look-out while steering, Shortly, When Helmsman needs to steer, proper lookout person shall be stationed.

In case of changeover to Hand steering during period of river transit and when navigating through restricted waters, the time and location of engaging hand steering should be recorded in the deck log book or bell book.

You should be aware of the possibility of sudden failure of the steering systems.

The "off course alarm" unit must always be activated in order to give warning of any failure of the automatic steering systems.

## 8. NAVIGATION IN COASTAL WATERS

The charts (including ENC) used should be the most suitable for the planned passage.

You should positively identify all relevant navigation marks.

Radar should be operated and used in coastal waters to supplement visual fixing. When navigational marks are not clearly visible, or in restricted waters where continuous monitoring of Vessel's position is desirable, radar can be used for parallel indexing and can replace visual fixing altogether.

You should confirm properly ship's position in timely with required in order to keep the safety coastal navigation, must comply with all existing International and Local Regulation for the safety of navigation, also ensure the keeping a good watch stated in chapter 2 of this document.

\* See relevant check list (FOM-04-F08)

## 9. INTERVALS OF POSITION FIXING

Position fixes should be taken at regular intervals. The frequency depending upon factors such as distance from nearest hazard, speed of Vessel, set experienced, etc.

- Interval instructed by Master and recommended by [the company](#).

Navigation area & condition	Intervals				
	by Master		<a href="#">by Company</a>		
In deep and open sea	Every	min.	Max.	60	min.
In coastal water	Every	min.	Max.	15	min.
In confined water	Every	min.	Max.	5	min.
While arriving / departing	Every	min.	Max.	5	min.
Under pilotage	Every	min.	Max.	5	min.
In restricted visibility	Every	min.	Max.	5	min.

## 10. MINIMUM DISTANCE OF APPROACH

OOW should keep the following minimum distance of approach from all vessels:

- 1) In case own vessel is give-way vessel;
  - a) In case of passing ahead of the other vessel at least 2 miles or more CPA should be kept, otherwise pass astern of the vessel;
  - b) In case of passing astern of the other vessel 1 mile or more CPA should be kept
  - c) In case of passing the other vessel abeam :  
In coastal navigation : CPA of 1 mile or more, Ocean navigation: CPA of 2 miles or more.
- 2) In case my vessel is stand-on vessel; No limit of CPA

The above standard is applied when the collision avoidance is established according to COLREG or the circumstances and condition around the vessel allow. In case the above CPA limits cannot be kept, call the master.

When the visibility is restricted, stricter principles than the above should be applied.

The master may adjust the avoidance guide line applying correspondingly to the above principle in consideration of the sailing route and the vessel's situation, and should accordingly execute it.

- Minimum CPA instructed by Master and recommended by [the company](#).

Navigation area & condition		Minimum CPA	
		by Master	<a href="#">by Company</a>
Own ship is a Give way vessel			
Passing Ahead of other vessels		NM	2 NM
Passing Astern of other vessels		NM	1 NM
Passing Abeam of other vessels	In Coastal	NM	1 NM
	In Ocean	NM	2 NM
Own ship is a Stand on vessel			
All circumstances		NM	No limit but, as safe as possible

- \* When give other vessel a wide berth, one must keep in mind that that wide berth should be applicable for all vessels in the vicinity.

## 11. RESTRICTED VISIBILITY

When restricted visibility is encountered or expected, your first responsibility is to comply with the 1972 International Regulations for Preventing Collisions at Sea (COLREG).

Informing Master:

- You should inform Master when the visibility deteriorates as below.
- Visibility instructed by Master and recommended by [the company](#).

Navigation area & condition	Visibility to call the Master	
	by Master	<a href="#">by Company</a>
Visibility	NM	3 NM

Posting look out:

- Master instructs to post additional lookout on the bridge as necessary when restricted visibility is encountered, if necessary order to whom it persons are must be determined in according to the condition of officer or rating be at rest room such as persons to engage for next duty watch in order.
- Persons to be employed for the additional lookout are;

Time	Rank	Name
~		
~		
~		

When restricted visibility is encountered, the navigation lights should be put on appropriately.

When restricted visibility is expected, in case of only one radar standing by, the second radar should also be kept stand-by and operated in good time before visibility deteriorates.

\* See relevant check list (FOM-04-F01)

## 12. CALLING THE MASTER

OOW should call or notify Master immediately under any of the following circumstances:

- 1) If restricted visibility is encountered or expected
- 2) When CPA/TCPA criteria is breached or as required by Master standing order/Night orders
- 3) If traffic conditions, density or the movements of other ships are causing concern
- 4) When a distress alert has been received or a distress signal has been sighted
- 5) If difficulties are experienced in maintaining course
- 6) When there is a significant difference between the latest observed position and the expected position of the ship
- 7) On failure to sight land, a navigation mark or obtain soundings by the expected time
- 8) If, unexpectedly, land or a navigation mark is sighted or an unexpected change in soundings occurs
- 9) If amendments to the passage plan require immediate approval
- 10) If there is a breakdown of the engines, propulsion machinery remote control, steering gear or any essential navigational equipment, alarm or indicator
- 11) If the communications or GMDSS radio equipment malfunctions
- 12) In heavy weather(B/S 8 and more), if any doubt about the possibility of weather damage
- 13) If the ship meets any hazard to navigation, such as ice or a derelict
- 14) If any vessel security concerns arise (i.e. Piracy)
- 15) In any emergency situation
- 16) In any cases when the situation is beyond the experience of the OOW or if there is any doubt regarding the safety of the ship, or ability to comply with regulatory requirements

Before Master reaches to the bridge OOW should take necessary action at his discretion to avoid an actual or expected immediate danger.

Regardless of the requirement to notify Master immediately in the foregoing circumstances, you should not hesitate to take immediate action to ensure the safety of Vessel whenever circumstances require.

Master notifies OOW whereabouts of him whenever he leaves his cabin.

\* See relevant check list (FOM-04-F09)

### **13. NAVIGATION WITH PILOT EMBARKED**

The presence of a pilot does not relieve you from duties and obligations.

For your information pilot are usually exempted from any liabilities for damages caused by his activities as a pilot regardless of his mistake or lack of due diligence.

You should communicate and co-operate closely with the pilot to assist him as necessary and maintain an accurate check on Vessel's position and movements.

If you have any doubt or become uncertain of the pilot's actions or intention, you should ask for clarification and, if still in doubt or unclear, should inform Master immediately and take the necessary action before Master reaches on the bridge.

Upon arrival of the pilot on bridge the master should present the Pilot Card immediately and hand over the right of ship's maneuvering to the pilot after briefing ship's maneuvering characteristics and other special matters about the vessel. The master also should exchange the navigational information with the pilot according to the Pilot/Ship Information Exchange form.

\* See relevant check list (FOM-03-F03, F04 & F05)

### **14. WATCHKEEPING PERSONNEL**

You should give the watchkeeping personnel all appropriate instructions and information necessary for maintaining a safe watch, including a proper lookout.

### **15. HELICOPTER OPERATIONS**

Master and OOW to be engaged in the transfer of personnel or stores by helicopter should make themselves familiar with the ICS Guide to Helicopter/Ship Operations.

## 16. LOG BOOKS

Proper records of the movements and activities of Vessel should be kept in the log book appropriately during the watch.

Vessel's log book is to be written up after complete taking over each watch at sea and in port and is to be kept the appointed in the chart room.

The following information, but not limited to be required to enter Vessel's Log Books:

- 1) Navigational data, such as bearing, time and distance off lights or other navigational aids, time and position of celestial fixes or positions obtained by electronic navigation equipment such as GPS and etc., or other means.
- 2) Courses steered, gyro and magnetic, together with the errors on gyro and magnetic compasses.
- 3) All alterations and adjustments of course made in the navigation of Vessel, together with the position and log reading at the time.
- 4) Ship's speed, distance of over the ground and the R.P.M. of the main engine.
- 5) Tank condition, such as quantity of ballast, fresh water, drinking water and fuel oil.
- 6) Any unusual circumstances, situations or events that occurred during the watch, including weather and sea conditions.
- 7) The time and ship's position when switch on/off of Echo sounder, AIS and BNWAS.
- 8) The time of change on machinery status.

Erasure must never be made in the Log Book, the Bell book, or on the course recorder chart. If an error is made, a thin line must be drawn over the erroneous part so that it remains legible.

The correct entry should be made above or below the erroneous part and initialed by the officer making the correction.

Bell Book ; The maneuvering data, e.g. time of passing a conspicuous objects, pilot boarding, also fact of the maneuvering works, any orders to the engine room except the data of automatic engine logger and etc. must be recorded in the Bell Book by a pen with indelible ink



## **17. SHIP AT ANCHOR**

A continuous anchor watch should be maintained by OOW during anchoring.

BNWAS shall be operated always during anchor watch.

OOW should:

- 1) Ensure that Vessel exhibits the necessary lights and shapes and, in restricted visibility, makes the necessary sound signals;
- 2) Ensure that an efficient lookout is maintained;
- 3) Ensure that the state of the main engines and other machinery is in compliance with the Master's instructions;
- 4) Determine and plot Vessel's position on an appropriate chart as soon as practicable, and at sufficiently frequent intervals check her position by taking bearings of fixed navigational marks, marks monitored by automatic radar plotting aids and/or readily identifiable shore objects;
- 5) Observe weather, tidal and sea conditions;
- 6) Notify Master immediately if Vessel start to drag her anchor and undertake all necessary remedial measures;
- 7) Notify Master if visibility deteriorates;
- 8) Ensure that rounds of Vessel are made periodically;
- 9) In appropriate circumstances maintain anti-piracy precautions.

## **18. VESSEL'S DRAFT & MANOEUVRING INFORMATION**

Master should ensure that the draft of Vessel is readily available to OOW throughout the voyage.

The draft should be displayed in the wheelhouse and adjusted as necessary to take account of changes which occur as the voyage progresses.

Chief Officer must ensure that changes in draft due to ballasting (particularly at sea) are calculated and properly recorded.

### **Maneuvering information:**

- A poster containing Vessel's particulars and detailed information describing the maneuvering characteristics should be permanently posted on the bridge.
- The format of the poster should be according to the IMO. Res. A601(15)