Annex A

Email sent by Timor Stream's master prior to the collision

From: Timor Stream - Master 10/03/2012 11:49 To: Geest Line / Operations Sent 10/03/2012 11:49 Sent 10/03/2012 11:49 Sent : Triton/Report 10/03/2012 11:49 Geest Line / Hataw Khola Sent Date: 10 March 2012 09:49 Msg: A06848-68242 Departure Manzanillo 10/03 (REF: TSM 2012 0601) TO: SRC/OPS/SM TO: TS/REPORT Good day, : 08/03/2012 1836 Berthed

: 18/03/2012 1730

: 08/03/2012 1842 Gangway down : 08/03/2012 Gantry in position : 08/03/2012 Gantry ready fr cargo ops : 08/03/2012 1850 Labour on board : 08/03/2012 1912 Commenced cargo operations : 10/03/2012 0224 End of Cargo : 10/03/2012 0236 Documents onboard : 10/03/2012 0236 POB : 10/03/2012 0248 Left Berth : 10/03/2012 0248 Start of Passage (SOP) : 0.0/0.0 Bunkers Received : 618.0/123.0/77.2 Bunkers ROB at SOP MT HSFO/LSFO/LSMGO

Departure Draft m : 7.50/8.20

Pilferage Prevention : no signs of pilferage

Next Port : Portsmouth

Distance NM : 3805.0

Time to go (hrs) : 202.7

Speed required (knts) : 18.78

REMARKS:

ETA

THANKS & BRGDS		
Tel:	/ Fax:	
Mob: E-mail		

Zodiac's instructions on collision avoidance

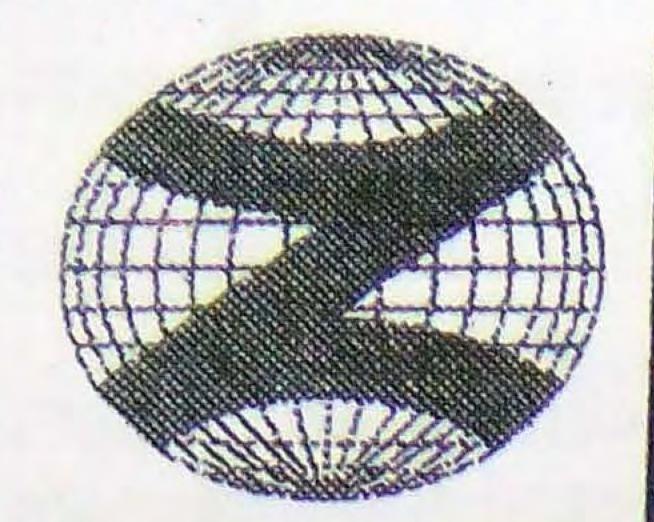
Collision Avoidance

6.99 Action to avoid collision shall be positive and made in ample time (i.e. long range). It must be such as to be readily apparent to an observer on the other vessel (observing visually or by radar). Breach of this rule is a factor in more than 80% of collisions.

- 6.100 A succession of small alterations of course shall be avoided. If necessary, the radar trial manoeuvre facility should be used to ensure that the required passing distance is achieved in the first instance.
- 6.101 The effect of collision avoidance action must result in both vessels passing at a safe distance and must be monitored to make sure that it is having the desired effect
- 6.102 In complex (multi-ship) situations, always try to consider the likely actions of the other vessels and attempt to allow for them. In such situations, it is particularly important to take action at long range and avoid becoming involved in a close-quarters situation. In general, it is always better to take action at long range rather than allowing a close-quarters situation to develop and then resolving it. Taking action at long range gives the opportunity to monitor and take further action in good time, should the other vessel take unusual action or otherwise fail to comply with the rules.
- 6.103 In coastal waters, consider whether alterations of course should be brought forward or delayed in order to avoid conflict with other vessels (e.g. when turning across traffic lanes). If in doubt, call the Master.
- 6.104 The VHF or AIS should not in general be used for collision avoidance, and in no circumstances whatsoever may they be used to agree a course of action which is contrary to the International Regulations for Preventing Collisions at Sea. Valuable time can be wasted in trying to establish contact, positive identification cannot be guaranteed, and even if contact is established, misunderstandings may arise. The VHF may be used for alerting an approaching vessel where the vessel is at anchor or Not Under Command.
- 6.105 If the vessel is at anchor or stopped at sea, Not Under Command, the Officer of the Watch shall maintain a particularly vigilant watch for approaching vessels. In the event of a vessel approaching so as to pose risk of collision, the Officer of the Watch shall call the Master and notwithstanding this, use every means at his disposal to identify and warn the approaching vessel of the situation and the vessel's inability to manoeuvre. If the vessel is considered to be in grave and imminent danger, this would include the transmission of a DSC Distress Alert and Message.
- 6.106 The primary means to determine whether risk of collision exists is to carefully monitor the compass bearing of an approaching vessel Visual bearings should be supported by the use of ARPA. Care should be taken in interpreting ARPA data, as instantaneous output data may be untypical. The display should be monitored over a sufficient period to ensure that consistent information is being obtained. In collision avoidance mode, the ARPA should be fed with speed-through-the-water input (i.e. log or manual input) and NOT speed-over-the-ground (e.g. GPS input). The latter can give serious errors in aspect, possibly resulting in misinterpretation of right of way, when vessels are in different tidal regimes.

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Extract of Seagate's master's Standing Orders



M/V "SEAGATE"~MBKV2~

LONDON

MASTER'S STANDING ORDERS

GENERAL

THE OFFICER OF THE WATCH IS THE MASTER'S REPRESENTATIVE AND HIS PRIMARY RESPONSIBILITY AT ALL TIMES IS THE SAFETY OF THE SHIP. HE IS RESPONSIBLE FOR ENSURING THAT THE PLANNED PASSAGE IS PROPERLY CARRIED OUT DURING HIS WATCH. HE MUST AT ALL TIMES COMPLY WITH THE 1972 "INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA" (COLREGS) AND "REGULATION II/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 AS AMENDED IN 1995" (STCW CONVENTION).

THE OFFICER OF THE WATCH SHOULD KEEP HIS WATCH ON THE BRIDGE. IN NO CIRCUMSTANCES SHOULD HE LEAVE THE BRIDGE UNTIL PROPERLY RELIEVED. A FUNDAMENTAL RESPONSIBILTY OF THE OFFICER OF THE WATCH IS TO ENSURE THE EFFICIENCY OF THE NAVIGATING WATCH. IT IS THEREFORE OF PARTICULAR IMPORTANCE THAT HE ENSURES THAT AN EFFICIENT LOOKOUT IS MAINTAINED AT ALL TIMES. IN A VESSEL WITH A SEPARATE CHART ROOM THE OFFICER OF THE WATCH MAY VISIT IT, WHEN ESSENTIAL, FOR A SHORT PERIOD IN ORDER TO CARRY OUT HIS NAVIGATIONAL DUTIES, BUT HE SHOULD FIRST SATISFY HIMSELF THAT IT IS SAFE TO DO SO AND THAT A GOOD LOOKOUT IS BEING KEPT.

THE OFFICER OF THE WATCH CONTINUES TO BE RESPONSIBLE FOR THE SAFETY AND NAVIGATION OF THE VESSEL DESPITE THE PRESENCE OF THE MASTER ON THE BRIDGE UNTIL SUCH TIME AS THE MASTER INFORMS HIM SPECIFICALLY THAT HE HAS ASSUMED THAT RESPONSIBILITY.

OUT IN THE VICINITY OF THE RADAR AND RADIO AERIALS, AND OF SOUND SIGNALLING 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.

KEEPING A GOOD WATCH

THE OFFICER OF THE WATCH IS RESPONSIBLE FOR THE MAINTENANCE OF A CONTINUOUS AND ALERT WATCH. THIS IS ONE OF THE MOST IMPORTANT CONSIDERATIONS IN THE AVOIDANCE OF COLLISIONS, STRANDINGS AND OTHER CASUALTIES.

IN ORDER TO KEEP AN EFFICIENT WATCH THE OFFICER OF THE WATCH SHOULD ENSURE THE FOLLOWINGS;

- A) AN ALERT ALL-ROUND VISUAL AND AURAL (SOUND) LOOKOUT TO ALLOW A FULL GRASP OF THE CURRENT SITUATION, INCLUDING THE PRESENCE OF SHIPS AND LANDMARKS IN THE VICINITY
- B) CLOSE OBSERVATION OF THE MOVEMENTS AND BEARING OF APPROACHING VESSELS C) IDENDIFICATION OF SHIP AND SHORE LIGHTS

D) CLOSE MONITORING THAT THE COURSE IS BEING STEERED ACCURATELY AND THAT WHEEL ORDERS ARE CORRECTLY EXECUTED

E) OBSERVATION OF THE RADAR AND ECHO SOUNDER DISPLAYS

F) OBSERVATION OF CHANGES IN THE WEATHER, ESPECIALLY THE VISIBILITY G) ALL NAVIGATION LIGHTS TO BE CHECKED (WHEN APPROPRIATE) AT REGULAR INTERVAL

THE MAIN ENGINE

THE OFFICER OF THE WATCH SHOULD BEAR IN MIND THAT THE ENGINES ARE AT HIS DISPOSAL FOR ASSISTANCE IN MANOEUVRING. HE SHOULD NOT HESITATE TO USE THEM IN CASE OF NEED, ALTHOUGH TIMELY NOTICE OF AN ALTERATION OF ENGINE MOVEMENTS SHOULD BE GIVEN WHEN POSSIBLE. HE SHOULD ALSO BE FULLY AWARE OF THE MONOEUVRING CAPABILITIES OF HIS SHIP, INCLUDING ITS STOPPING DISTANCE.

CHANGING OVER THE WATCH (See Bridge Check List 3)

IF A MANOEUVRE OR OTHER ACTION TO AVOID A HAZARD IS TAKING PLACE AT THE MOMENT WHEN THE OFFICER OF THE WATCH IS TO BE RELIEVED, HANDOVER SHOULD BE DEFERRED UNTIL THE ACTION IS COMPLETED.

THE OFFICER OF THE WATCH SHOULD NOT HAND OVER THE WATCH IF HE HAS ANY REASON TO BELIEVE THAT THE RELIEVING OFFICER IS SUFFERING FROM DISABILITY (INCLUDING ILLNESS, DRINK, DRUGS OR FATIGUE) WHICH WOULD PRECLUDE HIM FROM CARRYING OUT HIS DUTIES EFFECTIVELY. IF IN DOUBTS, HE SHOULD CONSULT THE MASTER.

THE RELIEVING OFFICER OF THE WATCH SHOULD ENSURE THAT MEMBERS OF HIS WATCH ARE FULLY CAPABLE OF PERFORMING THEIR DUTIES AND IN PARTICULAR THAT THEY ARE ADJUSTED TO NIGHT VISION. HE SHOULD NOT TAKE OVER THE WATCH UNTIL HIS VISION IS FULLY ADJUSTED TO THE PREVAILING LIGHT CONDITIONS AND HE HAS PERSONALLY SATISFIED HIMSELF CONCERNING THE ITEMS IN BRIDGE CHECKLIST 3

THE RELIEVING OFFICER SHOULD SATISFY HIMSELF REGARDING;

A) STANDING ORDERS AND OTHER SPECIAL INSTRUCTIONS OF THE MASTER.

B) THE POSITION, COURSE, SPEED, DRAUGHT OF THE VESSEL.

C) TIDES, CURRENTS, WEATHER, VISIBILITY AND THE EFFECT OF THESE FACTORS ON THE COURSE AND SPEED.

D) THE OPERATIONAL CONDITION OF ALL NAVIGATIONAL AND SAFETY EQUIPMENT BEING USED OR LIKELY TO BE USED DURING THE WATCH.

E) ERRORS OF MAGNETIC AND GYROCOMPASSES.

F) THE PRESENCE AND MOVEMENTS OF VESSELS IN SIGHT OR KNOWN TO BE IN THE VICINITY.

G) CONDITION AND HAZARDS LIKELY TO ENCOUNTER DURING HIS WATCH.

H) THE POSSIBLE EFFECTS OF HEEL, TRIM, WATER DENSITY AND SQUAT ON THE UNDERKEEL CLEARANCE.

PERIODIC CHECKS OF NAVIGATIONAL EQUIPMENT

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 MAGNETIC COMPASS AND GYRO COMPASS ERRORS ARE ESTABLISHED AT LEAST ONCE A WATCH AND ALSO IF POSSIBLE AFTER ANY MAJOR ALTERATION OF COURSE

C) THE STANDARD MAGNETIC AND GYRO COMPASSES ARE COMPARED FREQUENTLY AND REPEATERS SYNCHRONISED

D) THE AUTOMATIC PILOT IS TESTED IN THE MANUAL POSITION AT LEAST ONCE A WATCH.

E) THE NAVIGATION AND SIGNAL LIGHTS AND OTHER NAVIGATIONAL EQUIPMENT ARE FUNCTIONING PROPERLY

Seagate's master's General Night Orders

LONDON

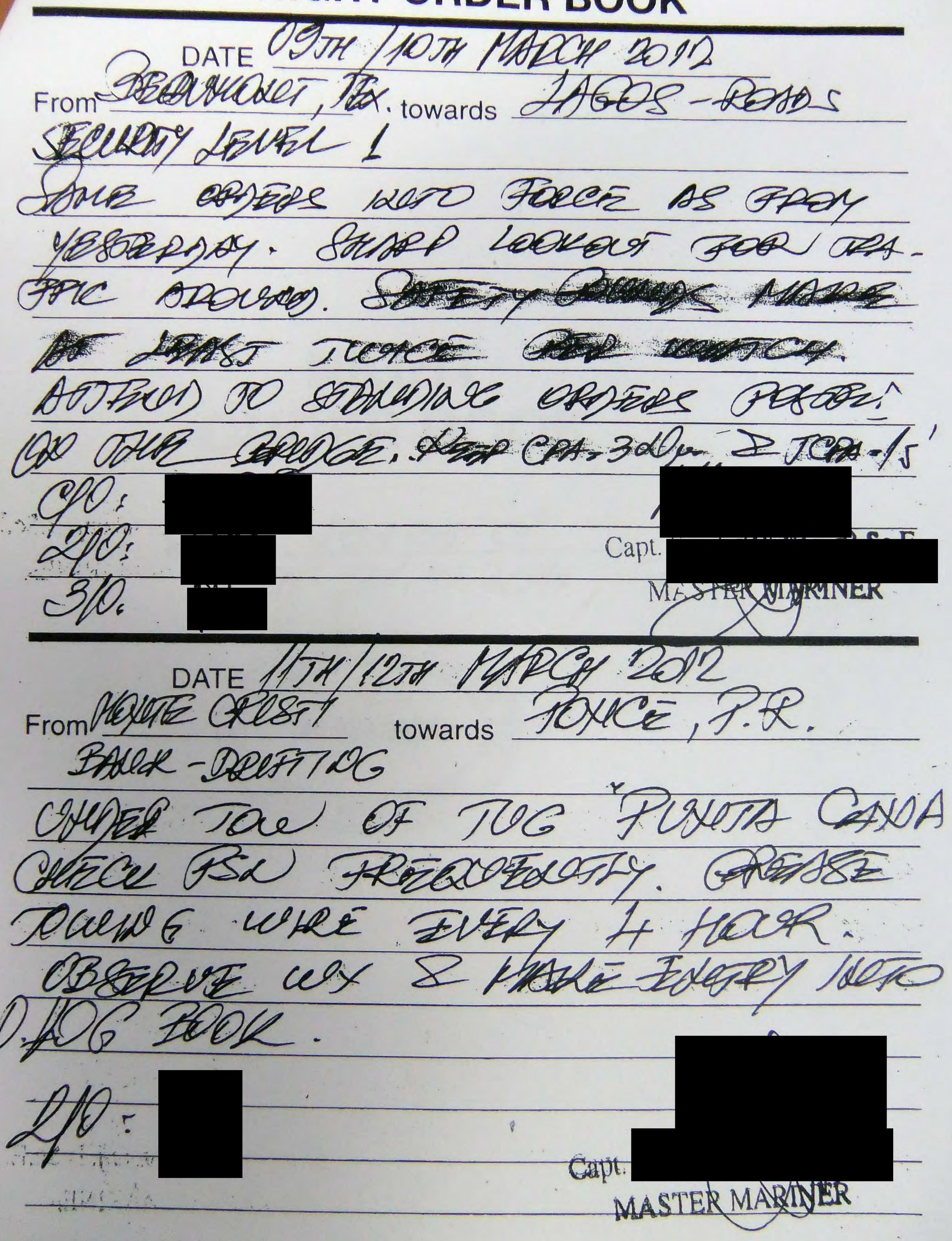
GENERAL NIGHT ORDERS

- 1. Please read the new Master's Standing Instructions (S.I.) which are placed on the bridge. From now on, the S.I. will be complied with at all times.
- 2. A sharp lookout is to be maintained at all times. Radars are to be used as appropriate.
- 3. Frequent radar plotting of all targets is to be done without fail.
- 4. Early action to avoid close quarter situations will always be taken in ample time and to be large enough so as to be clearly identifiable by all other vessels in the vicinity. In such case always inform me if time permits.
- 5. Positions are to be charted:
 - aa) at least once every hour in deep sea passages;
 - bb) every 10/20 min. on coastal passages;
 - Radar range/bearings and visual bearing to be used for position fixing and compared with GPS positions.
- 6. Always ensure that the vessel maintains her intended track as charted.
- 7. Compasses to be compared and error verified at least once every watch and logged
- 8. Always inform me if the visibility is reduced (down then 4 NM) or if the weather worsens.
- 9. In all situations, the appropriate checklists must be consulted/completed and logged
- 10. A continuous listening watch on VHF ch. 16, ch. 70 DSC and as appropriate to be maintained.
- 11. Any Nav area warnings received have to be plotted immediately.
- 12. Avoid areas of heavy fishing traffic.
- 13. Always ensure that the safe working and security practices are being adopted by the crew members on bridge duties.
- 14. Non authirised personal to be permited on bridge for phone calls only, by one person only and only if the navigational situation permits.
- 15. IF IN THE SLIGHTEST DOUBT AT ANY TIME DO NOT HESITATE TO CALL THE MASTER AT ONCE!

Please sign bel	was acknowledgement WISH YOU ALL	of your understand A SAFE WATC	nding of these orders. H!
MASTER	MASTER MARINER		SHIPPING ENTERPRISE
2/0,			MV SEAGATE
3/0,			IN IN ISLAND

Seagate's master's Night Orders

NIGHT ORDER BOOK



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Timor Stream's master's record of hours of rest



RECORD OF HOURS OF RES

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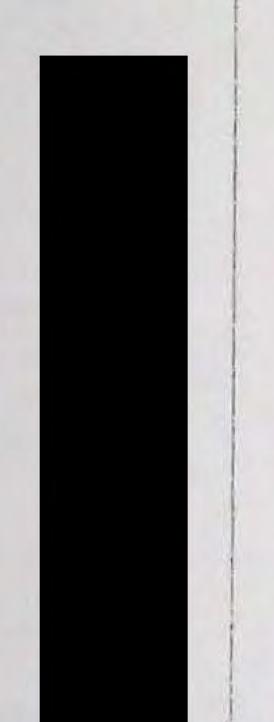
	Master	(es	
Seafarer (full name):	Position / rank:	Watchkeeper:	
Timor Stream	9172947	Liperia	
Name of ship:	IMO number (if any):	Flag of ship:	

The following national laws, regulations and/or collective agreements governing limitations on working hours or minimum rest periods apply to this ship:

ILO 180

seafarer concerned of the or rest reflection of the hours of work accurate l agree that this record is an

Name of master or person authorized by master to sign this record:



Signature of master or authorized person:

A copy of this record is to be given to seafarer.

This form is subject to examination and endorsement under procedures established by

Liberia

Signature of seafarer:

(name of competent authorit

	Periode of work are chaded free		NOT TO BE CON THE SEAF	APLETED BY
Date 00 01 02 03 04 05 06 07 08 09 10 11 12	22 23		Hours of rest in any 24-hour period	Hours of rest in any 7 day period
2012		14.5	14.5	100.5
02/03/2012		91	14	102.5
03/03/2012			14	102.5
04/03/2012		12.5		101
05/03/2012		12		100
06/03/2012		4.5		100.5
07/03/2012			7	100.5
08/03/2012		2		101
09/03/2012			13.5	100
10/03/2012		2.5	9.5	92.5
11/03/2012			6.5	80
12/03/2012				83
13/03/2012				81.5
14/03/2012				84.5

Timor Stream's master's Standing Orders - Bridge



Master's Standing Orders Bridge

doc code SAF.WI.01

version

In use since 15-Jan-06

page 2 of 2

Before performing any duties on a bridge: make yourself familiar with the complete bridge. You are only familiar with it when you can find and operate everything in the dark without hesitation. (e.g. communication equipment, navigation equipment and material, books, alarms etc.)

BE AWARE THAT THE SAFETY OF THE VESSEL IS IN THE HANDS OF THE OFFICER ON DUTY

A Just before watch take over, check:

- a. The charts/watch order book for instructions
- b. The sailing plan
- c. Position in chart & actual position
- d. Course in chart & actual course/speed
- e. Weather situation & forecast
- f. Traffic situation
- g. Nearest land (2 Johnen & where)
- h. Magnetic compass deviation & gyro error
- i. If VHF is on & set to channel 16
- j. If watch receiver(s) DSC are on
- k. If fire alarm/hold smoke detectors are on

B Regularly:

- a. Check navigation lights
- b. Check situation on deck (open manholes, doors, hatch covers etc.)
- c. Check alarms/engine temperatures on bridge
- d. Check actual course
- e. Make position plot

C Every watch, compare:

- a. Gyro compass with magnetic compass
- b. Repeaters with master gyro compass Check:
- c. Received weather charts/Navtex messages
- d. Satcom safety messages
- e. Log compass azimuth calculations if possible

D Continuously:

- a. Maintain a good lookout
- b. Check radar(s) (incl. adjustment)
- c. Make use of the available navigation aids to determine the vessel's position during your watch. Keep the vessel on the intended track as far as practical

E When course change (to give way) is required:

- a. Follow the rules of the road
- b. Do it in time, sufficiently and explicitly as far as practical, necessary and possible
- c. Always plot position after change of course

F in heavy seas/when the weather deteriorates:

- a. Warn master & deck crew & instruct crew to secure
- b. Warn engineer of the watch
- c Plot position regularly

G in congested waters:

a Call master

- b. Call extra lookout, as far as practical
- c. Man at the wheel, when necessary
- d. Radar(s) on & manned
- e. Checked courses/helmsman
- f. Echo sounder standby

H If visibility is (or threatens to become) less than 3 miles or during heavy traffic:

- a. Inform the master
- b. Radar(s) on/sharp monitoring of VHF
- c. Inform the engine room that speed might be reduced by the master
- d. Sound fog signal/whistle
- e. Plot position more often

I Before finishing your watch:

- a. Call the next watch
- b. Inform the officer about the general situation of vessel & her position etc.

J On finishing your watch:

- a Fill in the logbooks
- b. Check vessel for abnormalities

K Always call the master in case of doubt and also (but no limited to):

- a. If movements of other vessels cause concern
- b. If land or navigation marks are not sighted or if sounding are not obtained within the expected time
- c. If land or navigation marks are sighted unexpectedly or if an unexpected reduction of soundings occurs
- d. On breakdown of any essential navigation machinery or equipment
- e. If weather damage is suspected
- f. If indicated heading cannot be maintained
- g. Upon receipt of SOS/urgent messages

It is better to call the master a few times too often than once too late.

Of course the officer of the watch should not hesitate to take immediate action to ensure the safety of the vessel whenever the circumstances require such corrective action.



Annex H	ł
nternational Regulations for Preventing Collisions at Sea 1972 (as amended) - Extract	

<u>The International Regulations for Preventing Collisions at Sea</u> <u>1972 (as amended) (COLREGS)</u>

Rule 2 - Responsibility

- (a) Nothing in these Rules shall exonerate any vessel, or the owner, master or crew thereof, from the consequences of any neglect to comply with these Rules or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.
- (b) In construing and complying with these Rules due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.

Rule 3 — General definitions

For the purpose of these Rules, except where the context otherwise requires: —

(k) Vessels shall be deemed to be in sight of one another only when one can be observed visually from the other.

Rule 5 - Look-out

Every vessel 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.

Rule 7 - Risk of collision

(a) Every vessel shall use all available means appropriate to the prevailing circumstances and

conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.

- (b) Proper use shall be made of radar equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects.
- (c) Assumptions shall not be made on the basis of scanty information, especially scanty radar information.

- (d) In determining if risk of collision exists the following considerations shall be among those taken into account:
- (i) such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change;
- (ii) 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.

Rule 8 - Action to avoid collision

- (a) Any action taken to avoid collision shall be taken in accordance with the Rules of this Part and shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.
- (b) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.
- (c) If there is sufficient sea-room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.
- (d) Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be carefully checked until the other vessel is finally past and clear.
- (e) If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.
- (f) (i) A vessel which, by any of these Rules, is required not to impede the passage or safe passage of another vessel shall, when required by the circumstances of the case, take early action to allow sufficient sea-room for the safe passage of the other vessel.
- (ii) A vessel required not to impede the passage or safe passage of another vessel is not relieved of this obligation if approaching the other vessel so as to involve risk of collision and shall, when taking action, have full regard to the action which may be required by the Rules of this Part.
- (iii) A vessel the passage of which is not to be impeded remains fully obliged to comply with the Rules of this Part when the two vessels are approaching one another so as to involve risk of collision.

Rule 13 - Overtaking

- (a) Notwithstanding anything contained in the Rules of part B, sections I and II, any vessel overtaking any other shall keep out of the way of the vessel being overtaken.
- (b) A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22.5 degrees abaft her beam, that is, in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the sternlight of that vessel but neither of her sidelights.
- (c) When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly.
- (d) Any subsequent alteration of the bearing between the two vessels shall not make the overtaking vessel a crossing vessel within the meaning of these Rules or relieve her of the duty of keeping clear of the overtaken vessel until she is finally past and clear.

Rule 15 - Crossing situation

When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.

Rule 16 - Action by give- way vessel

Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.

Rule 17 - Action by stand-on vessel

- (a) (i) Where one of two vessels is to keep out of the way the other shall keep her course and speed.
- (ii) The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.
- (b) When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.
- (c) A power-driven vessel which takes action in a crossing situation in accordance with subparagraph (a)(ii) of this Rule to avoid collision with another power-driven vessel shall, if the circumstances of the case admit, not alter course to port for a vessel on her own port side.

(d) This Rule does not relieve the give-way vessel of her obligation to keep out of the way.