



4th Quarter 2016 – HSSE Bulletin

Suggestions/opinion from ships invited so that additional information can be added.

BBS – Best SPIRIT Card Selection:

The BBS system has replaced the previous Crew Commendation Award system. We deeply value the good reports submitted by the entire fleet (including TMS & TMM Vessel). These reports are an important motivation tool to foster the sense of pride into what we are doing and creating a sense of belongingness to the organization. Amongst the various reports submitted in the 4th quarter of 2016, the following three SPIRIT cards have been selected and will enter the final round of 12 SPIRIT cards which will be reviewed after the 3rd Qtr of 2017 for final selection of the 3 best SPIRIT cards for the yearly awards of \$1000 each.

OS noted a galley crew going out of the accommodation and was about to proceed to the poop deck in order to dispose food waste into sea during rough weather. OS immediately stopped the galley crew and reminded him that an additional hand shall made be available to assist and further to serve as a look out considering the heavy weather condition. OS further suggested the galley crew to don a safety belt as an additional precaution as he may lose control whilst standing and disposing the food waste.



OS John
Alcantara



OS MD Saiful Islam

OS noted shore manifold hose was leaking during discharging and immediately alerted the Duty Officer on the situation. Duty Officer ceased the discharging by stopping the cargo pumps and informed shore regarding the leaking hose. A shore personal attended to the leaking hose. Upon re-tightening and adjusting the hose, the discharging operation was re-commenced without any further issues.

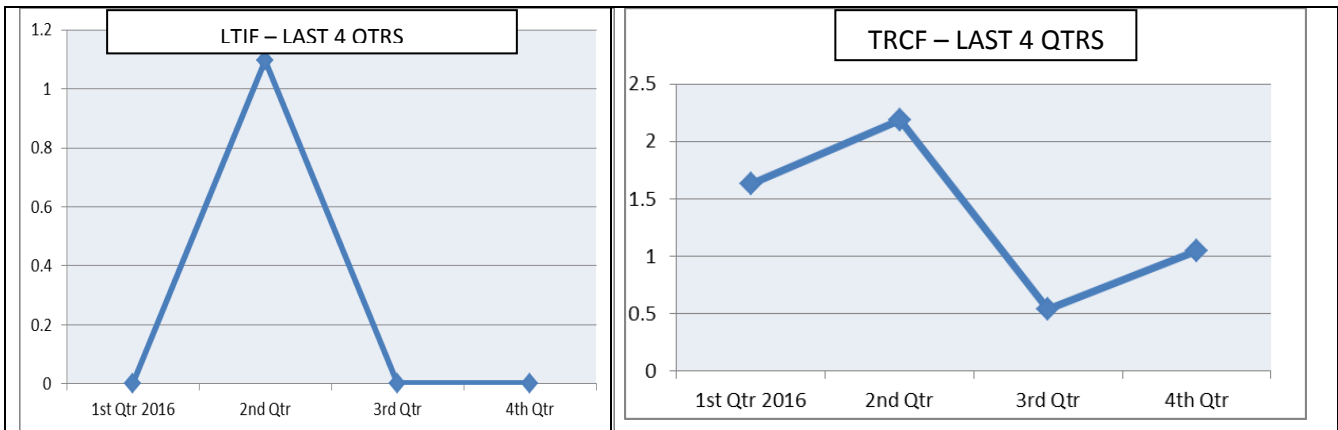
Two head lines parted during heavy weather whilst vessel was alongside berth. A/O noted some parted sections of the mooring lines was drifting towards the bow thruster which was in operation. A/O immediately alerted the Ch Off on the situation who was busy with the re-arrangement of mooring ropes on foscle. Ch Off immediately reported to Master on bridge on the situation and to stop the bow thruster operation.



A/O Zaw Htay
Win

(The text of the above acts of safety has been modified from the original for easier reading and understanding)

Crew Injuries / Fatalities:



For the year 2016, fleet LTIF was 0.28 and TRCF was 1.40. The target for the year 2017 is an average of previous 3 yrs. Hence LTIF of xxx & TRCF of xxx is targeted.

After cleaning the waste oil tank, 3/E was instructed to fix the door and fill the tank with sludge for incineration. 3/E fixed some of the bolts by pneumatic gun on one side and held the nut with his fingers on the other side as it was inconvenient to use a spanner to hold the nut due to limited spacing. While doing so 3/E right hand index finger and hand glove was caught in between the nut and door, resulting his right hand index finger tip flesh to come off slightly. 3/E was immediately brought to the ships hospital and first aid rendered. 3/E was sent for doctor consultation upon arrival port for further treatment. Case is treated as MTC.

Crews were arranging spool pieces at the midship hose tray whilst at sea. The spool pieces were moving about in the hose tray as vessel was rolling moderately at that time. During this time, A/B right hand middle finger was caught between the spool piece and hose tray coaming edge resulting in his finger top to be lacerated. First aid was immediately rendered onboard. A/B was thereafter sent for doctor consultation ashore. Case is treated as MTC.



(LTIF = Lost time Injuries Frequency as per OCIMF. This in general terms means number of injuries for every 1million exposure hours in the fleet. LTI includes injuries resulting in lost time, fatalities, severe injuries resulting in ability to work ashore/onboard. TRCF = Total Recordable Case Frequency as per OCIMF. This is also number of such injuries per 1million exposure hours in the fleet. It includes LTIF injuries as above and RWC- Restricted Work Day Case & MTC - Medical Treatment Case)

Near Miss:

Near miss reporting in the 4th quarter has been satisfactory. The annual target is 24 and crew are to be reminded that near misses should be reported without any fear or favour. There are only a few vessels which have to be sent reminders for near miss reporting. The following near misses may be noted by the SQC as they can be considered as significant learning or high potential consequence if the conditions were slightly different.

Prior hose disconnection, N2 blowing was conducted. Reportedly shore personnel opened the N2 supply valve very quickly without notice to vessel resulting in the ship / shore line to be over pressurized. The pressure gauge connected to no 1 common manifold had burst and dropped onto the drip tray. Fortunately no crew were standing at the vicinity. Master briefed officers and crew on the importance of close communication with shore during such operations and further to ensure equipment in use, such as the pressure gauge is in good working order.

Vessel was picking up Pilot for berthing. Whilst Pilot was embarking, the pilot ladder had loosened. Fortunately Pilot managed to climb onboard safely however was dissatisfied that the ladder was not properly checked prior his embarkation and complained to Master and further insisted that the matter will be brought to the attention of local authorities. Further investigation revealed that some distances between ladder was loose and cleared properly prior rigging. Master briefed all deck officers and crew on the importance of ensuring pilot ladder is properly secured and re-checked prior Pilot boarding as such lapses could have cause injuries to the Pilot with heavier repercussions against the vessel and company by the Port Authorities.

3/E tried to replace a damaged receptacle in the officers mess room. 3/E had turned off the NFB which supplied power to the receptacles in the officers mess room before proceeding to dismantle the damage receptacle cover. Fortunately 1/E who was at location noted that the transformer located near the damaged receptacle was still in operation. 1/E immediately instructed 3/E to stop and re-checked the voltage at the damaged receptacle and found power is still

available. 1/E re-checked the NFB position at the distribution panel and found that 3/E had turned off the power for a different location receptacle instead. The correct NFB was switched off before the damaged receptacle was replaced thereafter. Ch Eng briefed all officers on the importance of isolating the correct electrical panel and use of electrical permit prior such task is undertaken. Closer supervision to be further enforced.

During line blowing from ship to shore after discharge of Canola Oil, crew at the cargo tank pump stack had opened the drain cap for air hose connection. Suddenly remaining cargo in the line began flowing out. Fortunately crew reacted quickly and had shut the drain valve. Cargo that had flowed out earlier was thereafter cleaned and contained onboard. Ch Off who was at location immediately briefed all crews that valve condition must be thoroughly checked before the drain cap is opened.

The lifeboat was picked up after drill and found the aft side release handle was still at the red zone. Immediately chain blocks was installed to take the weight. Both forward and aft release cables were checked and found aft cable has partly deteriorated due to corrosion. Master briefed all officers on proper lifeboat operation and the importance of monitoring the aft & forward release handle setting returns to the green zone whilst boat is being hoisted to position. Additionally responsible officer was also briefed on the importance of proper maintenance and detecting early signs of wear and tear.

3/E stopped the FW generator for cleaning of condenser side. Vessel was at North Pacific Ocean at that time. Suddenly M/E had slowed down with jacket CFW high temperature alarm. The jacket cooling FW

valve line up was inadvertently mis-handled without checking the jacket temperature. 1/E immediately adjusted jacket cooling FW temperature on the M/E jacket local controller and re-set the M/E CFW high temperature alarm. M/E was operated without any trouble. Ch Eng briefed all Engineers on proper work procedures and required checks before commencement of any operation or maintenance.

Vessel dropped anchor at Fujairah waiting "B" anchorage and reported to Fujairah Port Control. Fujairah Port Control immediately replied that vessel had dropped anchor at an incorrect position and instructed vessel to shift her position to the designated anchorage, or otherwise heavy penalty will be imposed. Vessel re-checked her anchor position via ECDIS, GPS and coordinates of the anchor position boundaries and found location is correct. However Port Control informed vessel that the anchoring position was not correct in accordance to the latest local Marine Notice 213. Vessel immediately picked up anchor and re-dropped at the correct designated position as the new Marine Notices. Further checks revealed that vessel receive local notices, warnings, port limit, anchorage limits etc once entering the port as per usual however since there are usually no changes in the port information vessel officers had assumed no changes effected this time around as well thus did not review the received information in detail. Master briefed all deck officers on repercussions for overlooking such matters and reiterated the importance of reading all local port notices and information at every occasion and never to assume it shall be the same as before as this could have caused vessel to be fined heavily by local authorities and further such lapses compromised the navigation safety of the vessel.

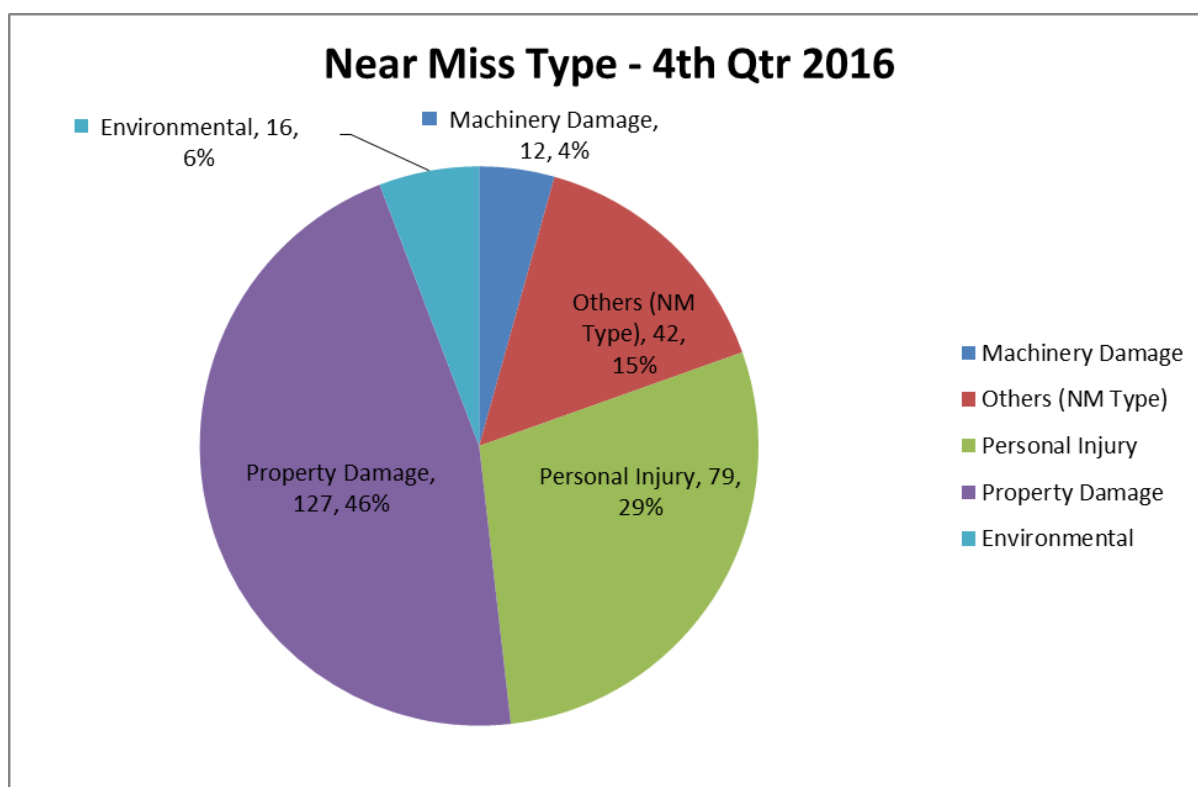
Master found crew had connected an extension cord and left his laptop charging on his bed during his accommodation rounds. The extension cord was immediately disconnected and crew concerned was summoned by Master for

an immediate briefing as it was a fire hazard. Master later convened a safety meeting to all crews and further stressed that such actions can lead to a possible fire onboard. Under no circumstances shall personal equipment such mobile phones, laptops etc be left charging and unattended at locations such as bed, sofa etc. where possible ignition is even greater.

Vessel was portside alongside Kerteh berth #5 with a mooring configuration of 3-2-2. Whilst alongside the following day vessel experienced bad weather, strong winds and high swells causing vessel hull to strongly interact with shore fenders. Subsequently vessel experienced three head lines parting. Master decided to cease cargo operations and immediately informed Loading Master. At the same time bow thruster was prepared and Master instructed bow thruster full to port in order to allow time for shore crew to re-arrange and make fast additional mooring lines. However no shore crew was available to immediately attend to vessel at that time as reportedly there was a shortage of shore mooring crew. Although such situations are beyond vessel control, Master again held a safety meeting with Loading Master on the importance of shore crew readiness and attendance to vessel in case of such emergencies. Master further briefed deck officers on the importance of monitoring weather condition and reporting in advance when such adverse weather condition development is noted.

Duty Engineer found heavy vibration on the FO line during E/R rounds. The pipe line was checked and found with loose U bolts and nuts. The position of the U bolts and nuts could not be seen easily as it is located in the heat resistance lagging. This could have resulted in leakage of high pressure fuel oil if left undetected. Ch Eng emphasized on proper safety checks in E/R and not to neglect such matters in the future.

The following pie chart indicates the analysis of the near miss in this quarter. It may be noted that Others (In Near Miss Type chart) includes the exceptions to rest hours.



Learning from Incidents:

There was no serious incident in this quarter

Amendments to QSMS:

In this quarter, two DTN's was issued.

DTN 04/2016: The changes included M03 App 3 ECDIS procedures revised, M05 App 17 Conductivity checks for UTI / MMC included, M07 Complete manual and appendixes revision, M14 App 5 new inclusion on information management & cyber security risks.

DTN 05/2016: The changes included M06 Sec 1, Polar Code App 1 & 2 and revised MARPOL code, with revisions to GMP, GRB, Garbage placard in view Annex I, II, IV & V are affected. M13 Contents, Sec 1,2 & 4 included with additional pre-boarding undertaking and compliance to policy, Maximum beer content of 5% stated, gangway check procedure included, un-announced test procedure enhanced, other general revisions conducted.

Amendments to EMS:

In this quarter, no DTN was issued.

Other Information to the fleet:

In addition to the circulars, general warnings, navigation warning, technical information & technical warning, following information was disseminated to the fleet in this quarter which is of prime importance.

11th Oct: D & V 3Q 2016

28th Oct: 4Qtr Shell LET

28th Oct: Notice on updated Shell Resilience Program training to vessels

02nd Nov: Notice on precautions during monsoon season – Nov to March

11th Nov: Notice on OCIMF advisory to SIRE inspectors

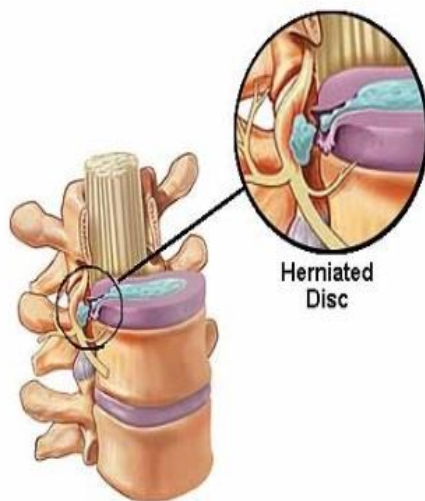
14th Dec: Notice on annual BBS award & TMA Managing Director's Award

29th Dec: Notice on Polar Code enforcement from 01st Jan 2017 & amendment to Marpol

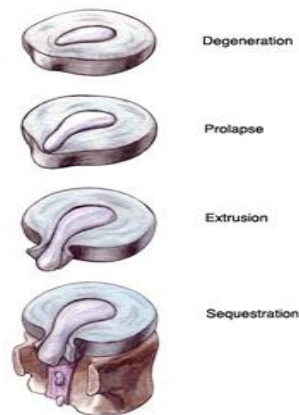
Health Bulletin

Lumbar Herniated Disc

A common cause of lower back and leg pain is a lumbar ruptured disc or herniated disc. Symptoms of a herniated disc may include dull or sharp pain, muscle spasm or cramping, sciatica, and leg weakness or loss of leg function. Sneezing, coughing, or bending usually intensify the pain.



Disc herniation occurs when the annulus fibrous breaks open or cracks, allowing the nucleus pulposus to escape. This is called a herniated nucleus pulposus or herniated disc, although you may have also heard it called a **ruptured disc** or a **bulging disc**.



- 1) **Disc Degeneration:** Chemical changes associated with aging causes discs to weaken, but without a herniation.
- 2) **Prolapse:** The form or position of the disc changes with some slight impingement into the spinal canal and/or spinal nerves. This stage is also called a bulging disc or a protruding disc.
- 3) **Extrusion:** The gel-like nucleus pulposus breaks through the tire-like wall (annulus fibrosus) but remains within the disc.
- 4) **Sequestration or Sequestered Disc:** The nucleus pulposus breaks through the annulus fibrosus and can then go outside the intervertebral disc.

Many factors increase the risk for disc herniation:

- a) Lifestyle choices such as tobacco use, lack of regular exercise, and inadequate nutrition substantially contribute to poor disc health.
- b) As the body ages, natural biochemical changes cause discs to gradually dry out, which can affect disc strength and resiliency. In other words, the aging process can make your intervertebral discs less capable of absorbing the shock from your movements, which is one of their main jobs.
- c) Poor posture combined with the habitual use of incorrect body mechanics stresses the lumbar spine and affects its normal ability to carry the bulk of the body's weight.

Combine these factors with the affects from daily wear and tear, injury, incorrect lifting, or twisting and it is easy to understand why a disc may herniate.

There are several factors that are within your control to prevent lumbar herniated disc. Take good care of your spine, watch your posture, don't smoke, make healthy food choices, exercise, and use good body mechanics, especially when you're lifting something. You can further refer to October 2015 issue of the Quarterly Health Campaign Bulletin title "Back pain at work: Preventing pain and injury".

Doing all of those things won't guarantee that you never get a lumbar herniated disc, but they are generally healthy steps you can take to try to prevent lower back pain caused by a herniated disc.

Regulatory Information :

SOLAS II-2/4.5.5 & II-2/16.3.3, FSS Code & IBC Code- All NEW tankers wef 1st Jan 2016 more than 8K DWT to have high capacity nitrogen generator. Most Charterer (Ex- Shell) insist to use if fitted during carriage of low flash cargo. Presently apply during carriage, unloading and tank cleaning, but ongoing debate to extend during loading as well.

IBC Code – Revised from 1st Jan 2016 – Certification of Protection (Inhibitor Certificate) MUST state whether the additive is oxygen-dependent and if so, the minimum level of oxygen required in the vapour space of the tank for the inhibitor to be effective to be specified.

MARPOL & IBC - New tankers constructed after 1 Jan 2016 require approved instrument with applicable intact and damage stability requirements. Existing tankers – 1st survey after Jan 2016 but in any case before 1 Jan 2021.

New format of IAPP certificate to be issued upon expiry of current certificate after 1 Mar 2016. Amendments to NOx certification status of engines.

Three emission control areas (ECA) have been announced by the Chinese Authorities. These are Yangtze River Delta, Pearl River Delta & Bohai-rim Waters. WEF 1st Apr 2016, in Yangtze River Delta will require ships to use fuel oil with a sulphur content not higher than 0.5% m/m, and will encourage ships to use fuel oil with a sulphur content not higher than 0.1% m/m, during mooring in the core ports; it will also encourage ships to use fuel oil with a sulphur content not higher than 0.5% m/m when entering into the ECA. The other 2 areas not yet implemented. Record same as other ECA areas- documented procedure, log book entries, etc. to be maintained

*Multi gas detectors to be carried on board from 1st Jul 2016. The multi gas meter should as a minimum test for oxygen, flammable gas, CO & H2S and to be used from the **outside to render the space safe for entry.** (5PID). They should not be part of PPE (Personal gas monitors). Implication - 2 Monthly drills to include the usage of multi gas meter. Confirm setting of alarms and familiarization of its usage by responsible officers.*

New format of SEQ certificate (Record of Safety Equipment) to be issued upon expiry of the current certificate after 1st Jul 2016. Total number of persons accommodated by free-fall lifeboats to be stated.

WEF 18th Jan 2017 amendment to MLC will come into force. Appropriate financial security must be provided to cover - Repatriation of seafarers following abandonment by ship owner (Reg 2.5) and Shipowners liability to assure compensation for contractual claims following death or disability of seafarer (Reg 4.2)

STCW 2010 Convention: Came into force 1 Jan 2012 but there is a 5 year transitional period granted for taking full effect from 1st Jan 2017. New certification requirements for able seafarers (watchkeeping certificate for ratings) to be in accordance with II/5 (deck) & III/5 (engine), along with Security Training.

New POLAR code will be drafted and apply to vessels trading in such areas. Entry into force from 1st Jan 2017. Various criteria for ship structure, sub division, machinery, etc.

SOLAS II-2/10 – Communication Equipment for firefighting team- Minimum of 2 two-way portable radio telephone (walkie –talkie) intrinsically safe type to be available for fire fighting team. New Ship to come into force 1st Jul 2014. Existing ships prior 1st Jul 2018

FSS Code-Breathing Apparatus-BA set should be equipped with audible alarm and a visual or other device before volume of air is reduced to 200 liters. NEW vessels from 1st Jul 2014. EXISTING vessels prior 1st Jul 2019. No implications as our vessels have the alarms.

Ballast Water Management -The main impact of these requirements is that ballast water exchange will be phased out and ballast water treatment will be the only remaining option for complying with the Convention. It will come into force (EIF) 12 months after ratification. Presently close to the figure of 35% of world fleet. Treatment Plant to be installed by 1st IOPP renewal survey after EIF. US have earlier implementation subject to exemptions.

O-O-O