### Fifth Edition - July 2019

# GOLD BRIDGE SHIPPING Health & Safety Ouarterly Bulletin

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Dear Captains and my beloved crews,

We are pleased to announce that our safety bulletin's 1<sup>st</sup> anniversary has come in July 2019. We are delighted with your continued support, articles for the safety bulletin and also for good feedback from ships.

I have had the pleasure to read ships' feedback on importance of bridge team communication by ship - "Defect that may affect ship's manoeuverability shall be reported to pilot on time so that deviation from plan and contingency measures, abort points can be identified and taken promptly & diligently". Another valuable feedback was - "Tg. Priok pilots are always in hurry".

We had an injury free 2018 and we are now in our 3<sup>rd</sup> quarter without any crew injury. Please maintain vigilance, crew motivation on safety and adhere to industry best practices and Company Safety Management System procedures.

We are content that the industry is visiting us and we expect to have a better prospect even with our well maintained old tonnages trading with almost flawless operation.

Let all of us continue to serve the industry with good seamanship practices, honesty, safety and care.

Best regards,

Capt. M. J. Uddin



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## SAFE APPROACH TO BERTH

Two incidents happened in 2019 which caused huge damage to the terminal and its installations:

Incident 1: A container vessel while approaching terminal, could not stop, struck the shore crane & brought it down completely.

Incident 2: A tanker proceeded to a Dolphin jetty with high speed and astern engine did not work. Video showed anchor dropped at last moment, smashed the whole jetty.

Such videos were shared with Masters and received their excellent feedback. The Master feedback includes no objective evidence of stern test and awareness on preventive measures.

A significant Near Miss Report (NMR): While approaching Jetty No.2 at Tg Priok, Harbor pilot was maneuvering at 7.0 knots.

The Master immediately intervened and brought the ship's speed down and the vessel berthed safely. Investigation found the Pilot worked on 12 hours ON and 12 hours OFF and his watch schedule was nearly over, likely fatigued and caused him to quick berthing.

Probable root-causes include:

- Vessel proceed berth with high speed.
- Engine failed to astern propulsion, likely PMS & maintenance failure.
- Astern engine test required by Industry Bridge Procedures Guide was not implemented.
- Emergency preparedness including use of anchors was not done on time.
- Pilot workload was too high, schedule etc. has placed him under pressure.

# Small slips, now unfit

A crew member was transporting a large quantity of provisions from the refrigerator room to the galley. The weight meant he had to hold the tray with both hands. Condensation had made the metal cover of the refrigerator room door area slippery. As the crew member stepped on it, he slipped and fell. He put his right hand down to try to break the fall and severely injured his middle finger.

The next day, with his finger now swollen and sore, the crew member informed the Chief Officer about the incident. He was given first aid and assigned light duties. When he visited a shore clinicat the next port of call, his right middle finger was found to be fractured. He was classified as unfit for duty and repatriated for further treatment and recovery.

#### **References:**

- SMS S-0504 section 8.4 safety procedures
- Code of Safe Working Practices for Merchant Seafarers section 8.10

• Pilot interest to increase number of ships in 12 hours schedule (Financial gain).



#### Lessons Learnt:

- 1. Test M/E astern as soon as possible after SBE.
- 2. Proceed at safe & controlled speed, watch pilot's action.
- 3. The Master shall be in control at all times.

#### Standard Operation Procedures (SOP):

- 1. Test Astern engine after standby without fail;
- 2. Pilot is adviser only, the Master shall ensure vessel proceed at safe speed.
- 3. Rule 6 of COLREG require "Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions".

#### Lessons learnt:

- The adage '<u>one hand for the ship and one for yourself</u>' reminds us to work with care.
- If you need to use two hands to carry something, ensure that the load is well within your physical limits. If necessary, make two trips instead of one.
- Never carry a load with two hands if you have to negotiate stairs; you should keep one hand on the handrail.
- Incidents and injuries should be reported immediately after they happen, however insignificant you may think they are at the time.



### Vessel Drags Anchor Causing Multiple Collisions

A vessel was in ballast and at anchorage at night, awaiting better weather before taking fuel and continuing the voyage. Five shackles of cable had been used to anchor the vessel and the OOW had set the variable range markers on the radar display to a head of land to the east and to vessel 'A', which were anchored three cables to the northwest.

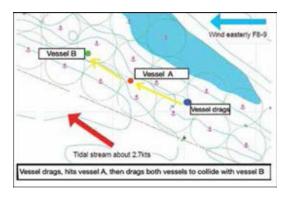
The OOW remained on the bridge completing chart corrections and other tasks and fixing the vessel's position on a paper chart every 30 minutes. The helmsman was sent below to do fire and safety rounds. The vessel began to drag anchor in a north-westerly direction, but the OOW only noticed this nine minutes later, when he saw on the radar that the distance to vessel A had decreased. He called the Master and ordered the engine as well as instructing the rating on duty to go forward and check the anchor cable.

Soon, the ship's speed had increased to 0.9kt, dragging in the direction of vessel A. The OOW on vessel A now contacted the first vessel to ask them their intentions. He ordered main engines and also alerted the Master to the developing situation. Before any other actions could be undertaken the stern of the vessel dragging anchor collided with vessel A's bow. By the time the main engine was available, the Master was unable to maneuver clear because his vessel's stern was fouled on vessel A's anchor cable.

The two entangled vessels were now set by the wind and tidal stream, at over 3 knot, towards vessel 'B', which was anchored two cables to the north-west. Vessel B's OOW had been monitoring the radio exchanges and had called the vessel's Master and crew. Although the Master of vessel B soon engaged astern propulsion this did not prevent contact with the oncoming vessels. All three vessels began to set to the northwest.

The official report's conclusions included, among others:

- The first vessel dragged anchor because insufficient anchor cable had been deployed for the tidal range and environmental conditions.
- The vessel's OOW did not immediately recognize the ship was dragging its anchor because the **anchor position monitoring interval was not appropriate**.
- The vessel was unable to maneuver quickly because its engines were not in immediate readiness.



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#### Lessons Learned

- Anchor watch needs your undivided attention
- Several methods can be used to calculate the necessary scope of cable needed when anchoring including (where Wd is water depth in metres): number of shackles of cable = 1.5√ (Wd), or length of cable in metres = 6 to 10 × (Wd)
- Water depth to draught ratio (Wd/D) is an important factor to consider when anchoring in strong currents. Smaller ratios will cause greater forces to act on the hull; this may cause the vessel to drag anchor at low water even though all was fine at high water.
- Factors such as the strength of the wind and tidal stream, tidal range, nature of the seabed, sea conditions, vessel loading, the extent of safe water available and duration of stay must also be considered when anchoring.

#### References:

- SMS S-0501P section 3.0 "Anchoring".
- OCIMF Anchoring Systems and Procedures section 5.2
- ICS Bridge Procedures Guide Duties of the Officer of the watch

\*Collected from Nautical Institute

# Grease bucket lands on head



Crew members were assigned to grease the crane hoist wire. Two crews went up the crane post to make the necessary preparations while another made fast the 5-litre grease bucket to a heaving line. When ready, the bucket was heaved up manually by one of the crew aloft. While raising the bucket, the heaving line parted and the grease bucket fell, hitting the crew member's head on its way down.

Luckily the victim was wearing a safety helmet, but he nonetheless suffered severe neck and head pain and was later signed off for further medical attention ashore.

#### Lessons learned

- Never place yourself under a lift, no matter how small. Small objects falling from height can still be dangerous.
- Using heaving lines to lift small loads may be a common practice, but it is not entirely appropriate. A dedicated 'light-load' line with a known SWL and in good condition should be used in order to reduce risks, as in this accident.

#### References:

- SMS Cold Work Permit for working aloft / over the sides.
- Code of Safe Working Practices for Merchant Seafarers chapter 17;
- Permit to work at height / over the side COSWPFMS Annex 14.1.2

# Safe Use of Hand Operated Chain Block

The purpose of this bulletin is to offer general guidance on those factors that should be addressed and pays attention during operation, maintenance and storage of chain block to help ensure that HSE risks to personnel or assets are minimized.



Figure 1: Working with chain block during engine overhaul

#### Introduction

Whilst at sea, in port or during dry docking repair period, ship crew perform their routine task and duties, service and maintenance work will commonly utilizing chain block to aids on the heavy lifting work.

It is vital for ship crew to understand the safe handling of chain block and it maintenance for safe use.

#### What is a Chain Block?

A Chain Block (also known as a hand chain hoist) is a mechanism used to lift and lower heavy loads using a chain. Chain blocks contain two wheels which the chain is wound around. When the chain is pulled, it winds around the wheels and begins to lift the item that is attached to the rope or chain via a hook. Chain Blocks can also be attached to lifting slings to lift the load more evenly.

#### How Does a Chain Block Work?

A Chain Block contains a lifting chain, a hand chain and a grabbing hook. Some chain blocks are operated using electricity example in ship engine room overhead crane or gantry crane. First, the chain block needs to be connected to the load via the grabbing hook. Then when the hand chain is pulled, the chain tightens its grip on the wheel and forms a loop inside the mechanism causing a tension which lifts the load from the ground or deck surface.

#### What is a Chain Block used for?

Due to its lifting capabilities with different lifting capacity, Chain Blocks are commonly used in engine room for different application such as during engine & machinery overhaul they are able to remove engines parts from engine. Lifting and transfer store onboard. Because they can be operated by one person, Chain Blocks are a wonderfully efficient way to complete jobs which may have taken more than two crews to do.

Chain Blocks come in a variety of different capacities making them suitable for a wide range of operations. Onboard ship we usually keep range from 0.5 ton to 3 ton for ship routine work.

## Safety

This information is of a general nature only covering the main points for the safe use of hand chain blocks. It may be necessary to supplement this information for specific applications.



Figure 2: Chain block use for assist in heavy lifting

### **Always:**

- Store and handle chain blocks correctly.
- The block chain should be properly oiled & lubricate when use especially after in contact with sea water.
- Inspect chain blocks and accessories before use and before placing into storage.

• For top hook suspension, use hooks that are fitted with safety catches, ensuring the support fits freely into the seat of the hook.

- For trolley suspension, ensure the trolley is correctly set for the beam width.
- Check that the bottom hook will reach its lowest point without running the chain fully out.
- Adopt safe slinging practices and follow the instructions for the safe use of the equipment.



# **Never:**

- Expose chain blocks to chemicals, particularly acids or prolong contact with sea water.
- Replace the load chain with a longer one.
- Operate exceed the safety working load.
- Use undue effort to force the block to operate.
- Throw, drop or drag a chain block on deck.
- Keep free handing load suspend in the air.
- Permit the load to swing out of control.
- Allow oil or grease to come into contact with the brake.
- Expose a chain block directly to the heat elements, water spray, steam, sea water etc.

#### **Selecting the Correct Block**

- Hand chain blocks are available in a range of capacities and with various types of suspension.
- Select the block to be used and plan the lift taking the following into account:
- Type of suspension hook, trolley, eye pad SWL, hazardous environment etc.
- Capacity, class of use and range of lift. Chain blocks are designed for vertical lifting only.

#### **Storing and Handling Chain Blocks**

- Never return damaged blocks to storage it should be report to office for disposal.
- Chain block should always keep dry, clean, well lubricate and protected from corrosion.
- Store blocks by their top suspension with chains clear off the ground, the chains may be wrapped together to facilitate this storage arrangement.
- Non-portable blocks stored outdoors should be covered and protected from corrosion. Blocks should not be dropped, thrown or dragged across the deck.

#### Installing and Usage of Chain Block

- Follow any specific installation instructions issued by the maker and the general requirements given overleaf.
- Try the block to ensure that it operates correctly and that the brake is effective.
- Ensure the chain is not twisted, it must move freely. The bottom hook must reach the lowest position required without the chain running fully out.

#### **Using Chain Blocks Safely**

- Do not attempt lifting operations unless you understand the use of the equipment and the slinging procedures.
- Do not use defective blocks, slings or accessories and never use the block chain as a sling.
- Check the slinging arrangement, that the block is safely rigged and that chains are not twisted, particularly in the case of multi chain blocks used.
- Check whether the load is free to move before commencing and that the landing area has been prepared.
- Raise the load just clear, then halt the lift to check the integrity of the block, slinging method etc.
- Check the travel path is clear and that you have a clear view so as to avoid accidental hook engagement or collision.
- Follow any particular site safety rules applicable to the movement of suspended loads. Keep fingers & foot etc. clear when lowering loads.



Figure 3: Chain block arrangement in Engine room

#### In-service Inspection and Maintenance

- Follow any specific maintenance instructions issued by the supplier but in particular keep load chains lubricated and check the operation of the brake.
- Brakes must be kept free of oil, grease etc.
- Never replace the load chain by crew.
- Regularly inspect the block and, in the event of the following defects, refer the block to a Competent Person for thorough examination:
- Wear, damage to trolley, hooks and fittings;
- Damaged or distorted slack end anchor;
- Chains worn, bent, notched, stretched, corroded, twisted or jump;
- Load slips or will not lift;
- Damaged block casing.



# **QUIZ NO.5 JULY 2019**



All Crews on board are eligible to submit the answers. Please send answers of the quiz by sending it via email to: Uddin@gbship.com by latest 31st of August 2019.

### ANSWERS TO QUIZ NO 4 APRIL 2019

 It was observed the loading Master took cargo sample from cargo pump stack instead of cargo tank(s) and brought to crew mess room and filled in bottles marked Manifold and each cargo tank. The AB reported to 2/O. What 2/O will do? Should 2/O report this to the Master and if yes, what the Master shall do?

Answer: (1) 2/O report to the Master & C/O; (2) Deal gently with loading master; (3) Report to office; (4) Issue LOP that loading master failed to take manifold sample & making wrong sampling process, (5) Take sample with loading Master for each tank.(6) Seek office advise on further action in respect of no representative manifold sample; (7) Reject pump stack sample as "Representative sample". (8) Report to Charterers if shipping instruction requires so.

2. The vessel came to load port with very tight laycan. While mopping & drying, the deck rating found some last cargo residue dripped from PV lines into cargo tank bottom. The AB reported to Chief Officer. What C/O and the Master shall do?

Answer: (1) Call urgent meeting & make team to carry out fast cleaning. (2) Report to office, seek more time to clean and request to extend Laycan to Operations; (3) investigate the causes of PV line cleaning failure, carry out internal discussion with crews and report to office.

3. A new building on her maiden voyage was loading; the deck rating on duty has reported an abnormal sound coming from no. 5P cargo tank to duty 2/O. The 2/O reported "no problem, it is okay", the Master overheard such conversation over walkietalkie, what is the Master's reaction and action, if any?

Answers: (1) Stop all cargo operations immediately. (2) No cargo operation till the causes of abnormal sound is found and eliminated. (3) Investigate and Report to office.

### WINNER OF QUIZ NO.4 APRIL 2019: MT EROWATI 6 CONGRATULATIONS!

Quiz 1: Provide six good safety culture that you will implement.

Quiz 2: What is "Malware and Phishing"?

Quiz 3: Provide us five basic good seamanship principles in respect of safe mooring.

## What is Resilience?

"Resilience is an individual's ability to successfully adapt to life task in the face of social disadvantage or highly adverse conditions"



Adversity and stress can come in the shape of family or relationship problem, or work place and financial worries, among others.

#### Abilities of a resilient person:

- Stay Calm Under Pressure;
- Absorb High Level of Adversity;
- Bounce Back from Setbacks;
- Recover Quickly from Problems;
- Maintain Job Performance During Times of Pressure;
- Manage Work and Home Demands Effectively;
- Minimize Adverse Effects of Stress

#### Factors which develop and sustain a person's resilience:

- Ability to make realistic plans and Capable of taking the necessary steps
- A positive self-concept and confidence in own one's strengths and abilities
- Communication and problem-solving skills
- The ability to manage strong impulse and feeling.

Resilience is not a rare ability, in reality, it is found in the average individual and it can be learned and developed by virtually anyone throughout the specific training program.

Gold Bridge as Shell's Maritime Partners in Safety Program has adopted and implemented the Shell Resilience Program into its Training Plan as well as other safety related training provided by Shell to enhance crew ability to manage increasingly complex and busy lives.

By improving resilience, crew will have more positive mindset and a wider range of strategies on hand for dealing with everyday problems, by cultivating positive beliefs, behaviors and thought processes, everyone can become more resilient.



### **How to Identify and Prevent Cyber Threats**

'Cyber Risk' means any risk means any risk of accidents, incidents, financial loss, business disruption, or damage to the reputation of an organization through failure of its electronic systems or by the persons using those systems. (North of England Loss Prevention July 2017)

### Common Threats:

- Email offers something which "too good to turn down" but comes from unidentified sender, e.g.: transfer money, pictures, etc.
- Email supposedly from your bank, asking for bank details, user name and password, etc. this method called <u>phishing</u>, it is intended to steal your personal details by clicking malicious link.
- Email from telecommunication provider to upgrade mailbox, subscription details. Usually email always comes from unknown third party.
- Allowed access from external USB drive to your ship's critical computer including ECDIS from unknown party, may cause your computer infected by malware.
- You place your computer's password nearby your computer which can be used by any person to access your computer.
- Installing third party application to the ship's computer without prior notification to head office (IT or Company PIC)
- Update application only from trusted company e.g. Microsoft or IT PIC come on board.

#### References:

- SMS S-0502N section 10
- Cyber Security Plan
- Cyber Security Awareness Poster
- Safety Bulletin July 2018 Beware of Cybercrime
- The guidelines on Cyber Security onboard ships OCIMF, ICS, BIMCO, INTERTANKO etc.

### **Please Do Following!**

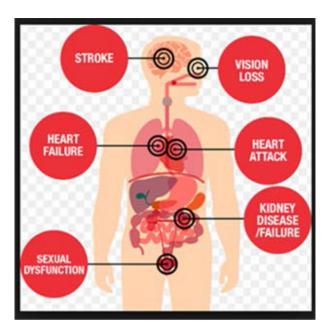
- Check and Re-Check
- Always ask for confirmation
- Do not put external USB drive to your operational computer
- Avoid Clicking Phishing email
- Do not Plug USB devices
- Do Not Install third party application from unknown resources





# Health Corner: Hypertension

Let's talk about Hypertension aka High Blood Pressure. Why? The risk that you'll have the illness is greater as you are older. And it is a fact that none of us is getting any younger, so yes "Let's talk about Hypertension".



Without treatment, high blood pressure, or <u>hypertension</u>, can lead to grave health conditions, including <u>heart failure</u>, vision loss, stroke, and kidney disease.

Herewith guideline to define range of blood pressure:

	Systolic (mmHg)	Diastolic (mmHg)
Normal blood pressure	Less than 120	Less than 80
Elevated	Between 120 and 129	Less than 80
Stage 1 hypertension	Between 130 and 139	Between 80 and 89
Stage 2 hypertension	At least 140	At least 90
Hypertensive crisis	Over 180	Over 120

Notes: The systolic reading refers to the pressure as the heart pumps blood around the body. The diastolic reading refers to the pressure as the heart relaxes and refills with blood.

#### Symptoms

Hypertension is usually called as silent killer because a person may not notice any symptoms. Therefore periodic blood pressure check is a must. However, high blood pressure sometimes can cause headaches, sweating, anxiety, and sleeping problem. When hypertension reaches the crisis level, a person can experience headaches and nose bleed.

#### What to Do?

Hypertension can be managed, again by taking amount of physical activity, reducing alcohol and smoking habit, also through diet. One must consume less salt and fat, eat more fruits and vegetables instead.

#### **Regular physical exercise**

People should exercise on at least 5 days of the week. Examples of activities include walking, jogging and cycling.

#### Stress reduction

Avoiding stress, or developing strategies for managing unavoidable stress, can help with blood pressure control.

Source: Medicalnewstoday.com

## Introducing

## www.gold-bridge.com

Gold Bridge has launched new website: www.gold-bridge.com as media of communicating between shore personnel and crews. We aim to make the web as the source of information beneficial for not only to share experiences and knowledges among shore and ship personnel but also to build the culture of Safety and Health from within ourselves. Go Visit the website and give us your comments!