First Edition - July 2018

GOLD BRIDGE SHIPPING LTD

Health & Safety

Quarterly Bulletin

Team : Capt. M.J Uddin - Chief Editor / Riza Padian - Editor / Ade Afriani - Co-Editor / Christophorus Sigit Triwaskito - Advisor
Support team: Zulkifli Muslim, Agung Arroyan, Riama Margareta, Inasti Yulanda

CONTENTS :

Dear Seafarers,

Welcome to the first edition of Gold Bridge Shipping's Health & Safety Quarterly Bulletin!

Here we are at one step forward to promote Health & Safety as part of our vision "Delivers with Safety and Care". The bulletin mainly focuses on the Health & Safety issues, not only of the crews and vessel but also for the environment as well. The bulletin will serve as media to communicate between us in head office and the crews with regards to topics that are relevant with our activities on board the vessel such as navigation, technical, cargo operation, and updates within the industry. We are committed to zero spill, zero accident, and reduction in permitted emissions without compromising safety.

We would like to extend our gratitude to all crews on board who have been supporting us, We hope you will continue to support our vision and mission with your professional experience, knowledge, best practices on board, new thoughts and whole hearted support.

We welcome any feedback from you readers.

Last but not least: Safety First and Happy Reading!

Regards,
Capt. M.J Uddin

Float Gauge Damage

What Happened?

To rectify low insulation on 100V AC, engineers have switched On/Off few times the cargo control system. Such frequent On/Off process caused all cargo tanks float gauges damaged due to electrical power surge. The problem subsequently caused vessel delay and unplanned repair costs.

The investigation found that there was not enough planning and briefing before the job carried out. There was no tool-box talk before test insulation.

Whenever crew found problem to any electrical cargo control system, the following procedure must be carried out:

1. Report a defect
2. Plan the job, discuss safety & process
3. Brief staff, tool-box talks
4. Implement Competency matrix for equipment trouble shooting /maintenance
5. Review the exiting frequency of annual servicing for its adequacy
6. If any doubt, please contact office for assistance.

ROPE LADDER INCIDENT

Most accidents on board ship are caused by slip, trips, and fall. Another incident again happened on 5th June 2018 at Chittagong Bangladesh. A Master (age 57), while taking draft using rope ladder at about 22:00hrs, slipped and fell down into the river in low tide. Other crews tried to save him by throwing lifebuoy, but Master was unable to catch it, and he is still missing until now.

Obviously from the above incident, we can learn there are some important precautionary actions need to be done prior working on over side vessel:

1. Was over side sufficiently lighted?
2. Was all vital equipment, such as rope ladder is examined beforehand? Is it of the right quality and condition (not slippery)?
3. Do you wear adequate Protective Personal Equipment? Do you wear life jacket?
4. Do you need safety belt & lifeline fitted?
5. Have you informed your team mate that you will be working over side and ask them to keep watch on deck?

When working over side work using ladder, crews:

- Must not try to overreach object
- Must never lose balance by leaning or stretching out too far
- Must never use one hand to climb ladder. Always use both hands.

Crew must always put safety first. The importance of following the procedure before carrying jobs is non negotiable.

For Procedure of carrying out over side work, please go to:

- **Code of Safe Working Practices for Merchant Seaman Chapter 14**
- **SMS Procedures S-0504 section 7.9, 8.4.**
- **SMS - Cold work permit.**

Safe Navigation Using ECDIS as Primary

SOLAS V/R.27 requires navigational charts (Paper & Electronic) are current and maintained up to date. The navigating officer shall correct Electronic Navigation Chart (ENC) & paper charts with latest NTM / navigational warning from all available sources to ensure safe navigation, protection of enviroment and avoidance of loss of life.

Standard Operational Procedures (SOP)

For safe navigation using ECDIS, below SOP MUST be followed by crews:

- Ensure all ENC/paper charts and nautical publications are updated weekly diligently.
- Review ENC/paper charts before executing passage plan.
- Ensure that Admiralty Information Overlay (AIO) menu is always "ON" and check during passage execution of any new danger.
- Collect & apply latest navigational warnings from all available source including NAVTEX, EGC and local agent well before approaching port.
- Be vigilant and report chart inconsistencies found to UKHO (Refer NP 231 Page vii) and office.

It was expected that Admiralty Information Overlay (AIO) issued weekly worldwide highlighting any significant changes. However, we found out that NOT ALL ENC are updated. For example there were two cases that we experienced during sea passage in Indonesian Waters. In these two cases, AIO did not show any such changes.

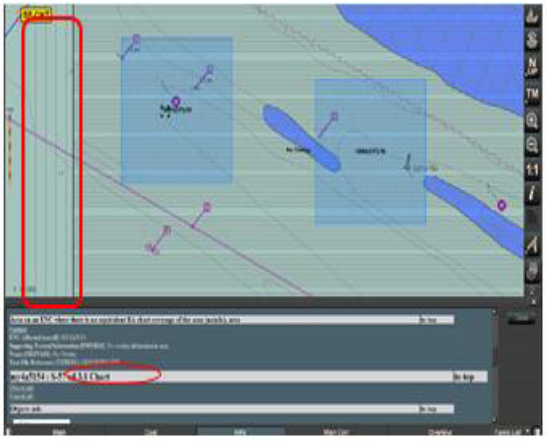
On Master's enquiry for navigational warning prior approaching port, the agent provided local port paper chart. Review of paper chart found dangerous shoals, passage was amended and a hazardous incident was avoided by Master's prudence.

It was found that below ENC charts were not updated:

i) ENC ID300060, ID4413KK (Selat Bangka): no overlay features, and

ii) ENC ID300511 (Tg. Bakau): Minimum depth shown on ENC chart was 20 meter, whereas actual fact six (6) dangerous shoals with minimum depth of 5.3 meter was shown on paper chart.

Such features were not in AIO menu though all ENC charts were licensed and updated to the latest weekly NTM from UKHO. The local authority did not update these charts, which is their obligation to provide them to UKHO.



ENC ID300511 (Tg. Bakau) show dept 20 M Manuall Correction ECDIS

Local Chart show 6 shallows water depth 5.3 M

In view of the above findings, in addition the above general SOP, below additional SOP must be followed for those areas with un-updated ENC, such as entering Indonesian waters:

Additional SOP for passing through/entering Indonesian waters:

All ships entering Indonesian waters MUST have port approaching paper charts, despite having ENC as Primary.

Where ENC charts fails to provide basic information of bottom topography to the navigators, the consequences could be:

- Grounding of a vessel
- Spillage of bunker and/or cargoes.
- Coastal area, fisheries affected
- Port blocked
- Fire/explosion on a tanker & possible loss of life & property
- Environmental disaster and so on.

We would like to extend our request to all maritime authorities to pay extreme attention for chart updates by Coastal Authority & UKHO.

References:

- NP 231 Chapter 6
- NP 232 Voyage Planning
- ECDIS Passage Planning (WHITERBY) Section 1
- SMS S-0501W(E)

Note: Above matters were reported to UKHO and also shared with all ships with lessons learnt & SOP action.

Welding Safety and Hazard Awareness

1. Electric shock

Electric shock is one of the most serious and immediate risks facing a welder. It can lead to severe injury or death, either from the shock itself or from a fall caused by the reaction to a shock.

2. Fumes and gases

Welding fumes and gases can be hazardous to your health. Welding fume contains potentially harmful complex metal oxide compounds from consumables, base metal and the base-metal coatings, so it's important to keep your head out of the fumes and use enough ventilation and/or exhaust to control your exposure to substances in the fume.

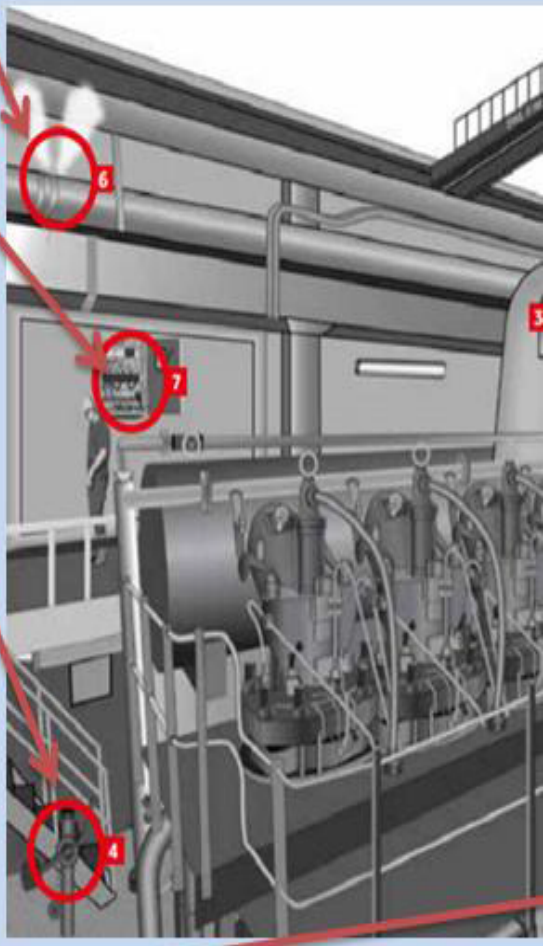
3. Fire and explosions

The welding arc creates extreme temperatures, and may pose a significant fire and explosions hazard if safe practices are not followed. While the welding arc may reach temperatures of 5,500°C , the real danger is not from the arc itself, but rather the intense heat near the arc and the heat, sparks and spatter created by the arc. This spatter can reach up to 10 meter away from the welding space.

ENGINE RO
AWA

6. Steam leaking in pipe joint: Leaking steam poses a risk of serious burns to crew members working in the engine room.

7. Fuse box open with exposed wires: The exposed wires present the risk of electrocution. Electrical switchboards should always be properly closed and insulation matting provided.



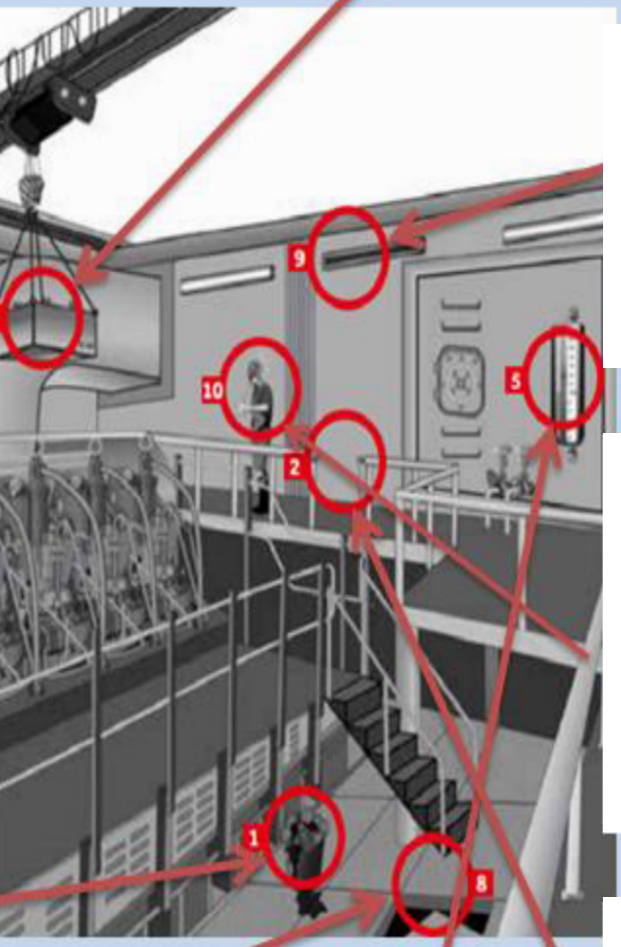
4. Double-bottom tank sounding pipe non-return device blocked in open position: An engine room may be flooded in the event of a collision or grounding that breaches the double-bottom tank if a sounding pipe non-return valve is blocked in the open position.

1. Dust bin with overflowing oily rags near a hot running engine: Oily rags are a well-known fire hazard whereby the substances on the rags can ignite due to an exothermic reaction from the nearby hot engine, causing a fire.

8. Loose floor plating: The missing floor plating may result in a crew member falling into the bilge spaces below the plating, causing serious injury.

OOM HAZARD
RENESS

3. Load on the chain block exceeds the safe working load: The overloading of the chain block may result in the catastrophic failure of the equipment and injury to the crew.



9. Engine room lighting damaged: Broken lighting reduces the ability of the crew to work effectively and safely in the engine room, which is a compartment with no natural light source.

10. Engineer walking around engine room listening to iPod: By listening to loud music in the engine room, thecrew member risks not being able to respond to a command, alarm or safety critical situation that may arise. Ipod/Mobile phone are not allow during watch keeping at bridge/engine room.

2. Missing section of handrail, chain left hanging: The simple, careless act of leaving the chain unhooked is a fall hazard for anyone passing.

5. Fuel oil tank in background with broken sounding glass: The broken sounding glass would allow for the content of the fuel oil tank to be emptied if at the same time the self-closing valve is blocked in open position.

Welding Safety,,,(cont)

To prevent fires, before beginning to weld, inspect the work area for any flammable materials and remove them from the area. Flammable materials are comprised of three categories: liquid, such as gasoline, oil and paint; solid, such as wood, cardboard and paper; gas, including acetylene, propane and hydrogen.

Injuries from insufficient PPE

Personal protective equipment (PPE) helps keep welding operators free from injury, such as burns and exposure to arc rays. The right PPE allows for freedom of movement while still providing adequate protection from welding hazards.

Other safety considerations

- Always use dry gloves
- Always wear rubber soled shoes
- Always use insulating layers
- Protect yourself from surface that conduct electricity
- When working on electrically powered machinery, make sure the frame is grounded
- Keep insulation on all welding equipment & components dry & in good condition
- Don’t change electrode with bare hand, wet gloves or while standing on wet surfaces.

Safe Cargo Operations

Many factors have contributed to unsafe cargo operation either during loading or discharging at terminal. Therefore, it is important that the cargo handling operation on tankers is leaded by the Master or senior officer in-charge. Every crew member involved in the operation must be aware of his or her routine duties and emergency situations.

The necessary precautions and safety measures (in addition to SSSCL) to ensure a lesser risk and incident free operation includes:

1. **Alarm system**

   Check alarm system prior cargo operation; include High Press/Low Press alarm, High Level/Over Fill alarm.

HL/OF Alarm

HP/LP Alarm

2. **Close Cargo Tank Lids**

   All Cargo tanks lids must be in close position especially while alongside at terminal even empty or not loaded.

Proper closed manhole

Opening manhole

3. **Close Ullage Ports**

   All ullage ports must be kept close during cargo operations.

4. **Close Sighting Ports**

   All sighting ports must be kept close during cargo operations

Monitored by sighting port

Monitored by open manhole

5. **Cargo Pump**

   Check condition and purging of cargo pumps before loading / on passage to discharging port and ensure Emergency Cargo Pump ready to use in case of emergency.

Inspect cargo pump

Check ECP

6. **Cargo hoses and flange connections**

   Cargo hoses and flange connections used for chemical / oil handling must be checked thoroughly before use.

Check flexible cargo hose

Check Reducer condition

7. **Stop ship Air Con if Required**

   If the AC system's intake air is drawing cargo vapors, it should be stopped immediately and the intake ports of the accommodation area should be shut.

8. **Keep an eye on mooring ropes**

   Mooring ropes must be monitored and tended regularly. Temporary stop cargo operations if necessary.

9. **Keep personal protective equipment ready**

   All personal protective equipment must be worn and equipment such as gas detection and SCBA must be kept ready.

Crew must never ignore the above procedures as these are designed to prevent incidents such as Fire/Explosion, Cargo tank deformation, Cargo Damages, Pollution, and Health hazard.

STANDARD OPERATIONAL PROCEDURES (SOP)

1. **Strictly implement closed cargo operations.**
2. **Refuse if terminal request for open cargo operation, issue Letter of Protest. Report immediately to office and wait further instruction from operation department.**

References:

- SMS S-0503, S-0503T, S-0503TC, S-0503TG
- ISGOTT – Chapter 24
- ICS Tanker Safety Guide Chemicals Chapter 6;
- ICS TSG Gas Chapter 4

Health & Safety at Work

Prevention Starts Here!

Safety Management Manual gives Master and crews rights. It sets out roles for crews on board which they can work together to make workplaces safer.

Find out about health and safety concerns.

✓ **Master and Crews have the right to**:
- Know about hazards and how to handle the situation.
- Refuse work if unsafe & find out a solution on overcoming the unsafe working environment

✓ **Master and Crews must**:
- Follow the company health and safety policies and procedures.
- Wear and use the proper protective equipment and attires provided by their company .
- Report any hazards or injuries to Master and company immediately.

✓ **Company must**:
- Ensure Master and crews know about hazards and dangers by providing information, instruction on how to work safely.
- Ensure Master and crews know what is required to protect workers' health and safety on the job.
- Create workplace health and safety policies and procedures.
- Ensure everyone follows the law and the workplace health and safety policies and procedures.
- Do everything reasonable in the circumstances to protect Master and crews from being hurt or getting into incidents or accidents

GRINDING SAFETY

Grinders, or tools that use abrasive / grinding wheels and discs, are commonly used in many worksites on board. It is important to note that rotating grinding wheels and cutting discs can break which leads to injuries.

To prevent injuries from using grinders, follow these safe work practices:

What NOT TO DO when using grinders :

- DON'T modify, alter, or remove the manufacturer's guard.
- DON'T use a wheel that has been dropped.
- DON'T use a wheel or disc that does not fit properly to the spindle or guards.
- DON'T use excessive force to tighten the nut of the wheel. The force can crack the wheel.
- DON'T leave grinding wheels or discs lying on workbenches or other surfaces unprotected from impact damage.
- DON'T use cutting discs for grinding, or grinding discs for cutting

What TO DO when using grinders :

- Ensure electrical connection is properly secured.
- Test power switch ON/OFF before operation.
- Check before grinding disc lock is well secured before operation.

References:
- SMS S-0504 section 8.1 & 8.2
- Code of Safe working practices for Merchant Seaman Chapter 1 & 2.
- GB Lesson From Incident (LFI) 01/2016 & Training Poster 02/2018

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 30th of August 2018.

Please mention your name, position and vessel.

Two (2) winners with correct answers shall be rewarded and shall be announced in next edition of Health & Safety Bulletin.

Questions:

1. Please name minimum 5 ship operation which can produce Static Generation on board tanker?
2. What are the hazards from strong wind related to cargo vapor?
3. Please name 3 types of eye protector and when these should be worn for each type?

How to lift safely

Assess the load and the lift	Be balanced, feet close to the load and slightly apart	Start crouching with knees and hips bent, tuck the chin in and let the legs do the work	Grip the load with the whole hand not just the fingers	Lift the load by straightening the legs, keeping it close to the body. Keep the shoulders level and facing the same way as the hips. Try not to twist – turn by moving the feet	Follow the procedure in reverse to put down a load, taking care not to trap fingers

Taken from Britannia "Health Watch" Volume 5 No. 2, Courtesy of the Britannia P&I Club

Beware of Cybercrime!

Cybercrime can be about taking down a website, steal someone's identity or taking control of network. There are many types of crime categorized as cybercrime.

The easiest target is not IT infrastructure, but people. According to reports, 99% of attacks are aimed at people like us.

We have a case ongoing whereby an officer being detained by police in Kaohsiung, Taiwan until he is able to establish his innocence due to his negligence while disposing his old SIM-Mobile Phone Card that he bought years ago using his ID card. Apparently, someone picked up the used SIM Card and committed fraud with it. The officer has been detained over a month when this article is written.

Cybercrime is real, keep your SIM Card carefully, and only dispose after it is properly destroyed so that no one can use it anymore.

References:

- SMS S-0502S section 10 & 11
- The Guidelines on Cyber Security onboard ships (OCIMF)
- IMO Circular MSC-FAL.1/Circ.3 on Guidelines on Maritime Cyber Risk Management