Interview with Junior Officer

Second Officer, NDSM: YEOM Dong-hun

Q How are you managing marine incidents?

A Every month, we send at least 3 cases of marine incidents to the company. When a marine incident occurs, we report it immediately and receive feedback from the company. Also, all crew members discuss the marine incident with the feedback during safety and quality meetings. We receive cases of marine incidents selected every quarter, which are then utilized as case studies.

Q What do you think was the cause of the marine incident that nearly caused a collision as a result of inattentiveness to radar setting?

A At the time, the radar was on a guard zone setting for document work in the chart room. After realizing that the audible alarm was not set off despite an identified object in the guard zone, the setting was immediately changed. The cause of the incident was not checking the alarm setting after using the guard zone setting. All matters related to the setting of navigation and communication equipments should have been transferred to the next officer on duty but we failed to do so.

Q How can such an incident be improved or prevented?

A Crew members should not change the setting of the alarm of navigation equipments, especially the audible alarm. Also, these alarms must not be ignored, but be checked without fail. The crew should be trained on this continuously.

Q Do marine incidents help with incident prevention?

A Reviewing marine incident reports every month and reading the maritime incident newsletter published by the Korean Maritime Safety Tribunal help to think deeper about the potential risks from operation and increase our vigilance.

Q What is your view on marine incident reporting?

A I think it contributes to prevention of marine incidents and accidents by revitalizing the marine incident reporting system.

Q Do you have any suggestions for the Maritime Incident Newsletter?

A I hope there would be more diverse cases of marine incidents and accidents.

Basic Terms for Safe Shipping

1. **Life boat :** Life boat is a self-powered boat that is used to abandon a ship in the event of distress at sea.
2. **Life raft :** Life raft is a round, inflatable tent-like boat that can be used in place of a life boat.

Maritime Safety Quiz

① The vessel should keep an appropriate OO at all times by using available means including visual and audio equipments to identify the surroundings and the risk of collision.

② A nautical instrument used on the vessel that identifies the direction and distance of an object by detecting its surroundings with radio waves is called OOO.

③ OOOOOOOOOO, which applies a computer CPU to a radar, helps to prevent collision by displaying information such as VECTOR and CPA of not only the vessel but also the surrounding objects on the screen.

④ On some vessels, there is a tendency to lower or eliminate the sound by changing the OO setting of the ARPA radar for convenience while on duty. It should be firmly kept in mind that this is an act to be refrained.

⑤ OOOOOOOOO is a public institution under the Ministry of Oceans and Fisheries that is responsible for training of personnel in the oceans and fisheries sector. It executes training and education of workers in the oceans and fisheries sector and manages the officer certification exam authorized by the government.

⑥ Places of operation with a risk of fire or explosion as a result of health hazard and inflammables from lack of oxygen, noxious gas and insufficient ventilation are called OOOO.

⑦ Vessels that sail through dangerous waters that pose a concern for the safety of the crew must install a OO OOO where the crew can become prepared urgently in emergency situations.

⑧ A self-powered boat used to abandon a vessel in the event of distress at sea is called OOO.

● **10 Winners of the Maritime Safety Quiz in the 3rd Newsletter**
KANG Jong-duk(Seoul), KIM Yu-jeong(Busan), BYEON Ja-gyeong(Seoul), SEONG Eun-young(Seoul), SHIN Mu-cheol(Busan), JEONG Ji-won(Seoul), CHOI Su-hui(Busan), CHOI Ji-min(Seoul), HAN Dong-ho(Busan), HUH Ju-yeon(Seoul)

● **Submission :** Korean Maritime Safety Tribunal (www.kmst.go.kr)
● **Deadline :** October 31, 2019
● **Winner announcement :** 5th newsletter publication, notified individually
● **Prize :** 50,000 won gift certificate (10 persons)

Contributions to the Publication

Korea Institute of Maritime and Fisheries Technology, Korea Shipowners' Association, Korea Maritime Pilots' Association, Korean Register, G-Marine Service, PO SSM, NDSM, Has Management, SK shipping, SINOKOR, KLCSM

First Step to Preventing Marine Casualty

Marine Incident Newsletter

● **Marine Incident** ●

Accident that is likely to pose a hazard to the safety of ships and people or the marine environment, if measures for rectification or improvement are not taken with respect to the structure, equipment, or operation of a ship

- Article 2(1)(b) of Act on the Investigation of and Inquiry into Marine Accidents

해양안전문화 정착을 위한 첫걸음

중돌 예방,
● 항법 지키고
● 주변 살피고
● 머리 피해야 합니다.

Ministry of Oceans and Fisheries
Korea Maritime Safety Tribunal

Joining the 4th Maritime Incident Newsletter

<LEE Dong-jae>
President of the Korea Institute of Maritime and Fisheries Technology

Considering the significant consistency between the analysis of key factors of marine incidents reported to the Korean Maritime Safety Tribunal from 2012 to 2017 through the 1st and 3rd issue of the maritime incident newsletter and the proportion of causes of marine incidents adjudicated in 2018, it can be said that continuous efforts to identify and improve marine incidents on board are the first step to preventing accidents.

To ensure that marine incident reporting and improvement efforts are not considered as a cost burden to shipping companies but rather as a way to reduce costs through prevention of accidents, there needs to be continuous interest and commitment for shipping companies to encourage the participation of crew members and expand the base.

The Korea Institute of Maritime and Fisheries Technology, in an effort to continually develop marine incident reporting, will utilize the marine incident prevention education sessions within each training program to spread the importance of the marine incident reporting system, and actively take part in improving current malpractice to achieve accident-free safe navigation of crew and vessels. Also, based on our accumulated know-how on education, we will effectively deliver the significance of safety management to crew members, and continue to improve our curriculum.

I hope that this newsletter will become the foundation for safe workplace of all people in the marine industry, and I look forward to your proactive participation.

What is Maritime Incident Reporting System?

In order to prevent marine incidents, the owner or operator of a ship shall inform the Chief Investigator of the Korean Tribunal of the marine incident that occurs in connection with the operation of the ship.

(Article 31-2(1) of Act on the Investigation of and Inquiry into Marine Accidents)

★As the CI Code came into effect in 2010, the International Maritime Organization (IMO) recommended member countries to manage marine incidents. In compliance, the marine incident reporting system was included in the Korean law.

★ Identity Confidentiality

The Chief Investigator of the Korean Tribunal shall not disclose the identity of the person who informs of a marine incident without his or her consent. (Article 31-2(3) of Act on the Investigation of and Inquiry into Marine Accidents)

Report to : **website** www.kmst.go.kr
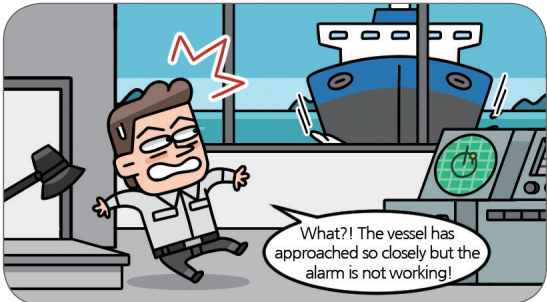**e-mail** kmst_special@korea.kr

Make sure the ARPA setting is correct before use!

A near-collision from incorrect ARPA radar setting

A second officer was on navigation duty by himself at sea when an object was detected on the radar screen.

?

It should be fine because the Guard Ring setting is on.

Before entering the tank, you must ventilate and measure the level of oxygen and noxious gas.

What?! The vessel has approached so closely but the alarm is not working!

Must comply! (Preventive lesson)

- Stay vigilant when on duty and assign a helmsman on duty when sailing at night
- Check inspection items when on duty (use a checklist)

Real case

Collision between Oil Carrier D and Cargo Carrier L
- 02:30 on January 11, 2014, about 2 miles northeast from the Hongdo Lighthouse in Tongyeong -

One of the factors of the collision was inappropriate collision avoidance action from engaging in other work in the chart room, not knowing that the situation called for the radar alarm to go off.
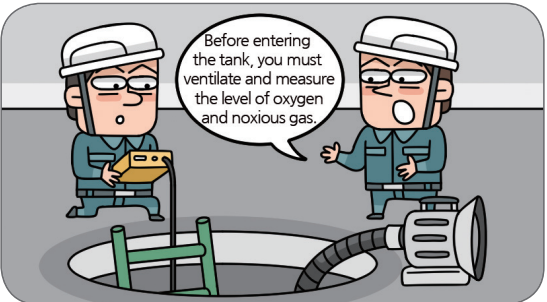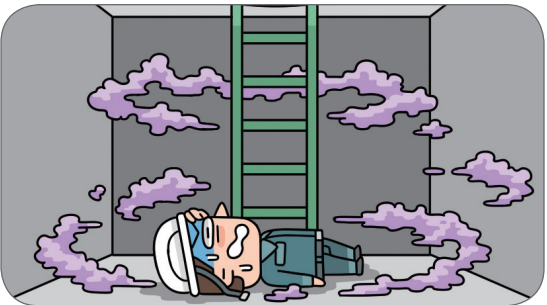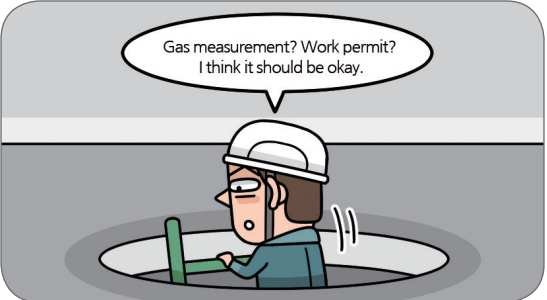

Comply to safety regulations when entering an enclosed area!

A near-suffocation accident from entering a tank without following safety regulations

A boatswain entered a tank without gas free inspection, gas measurement and work permit to enter enclosed spaces.

Gas measurement? Work permit? I think it should be okay.

Must comply! (Preventive lesson)

- Be familiar with the risk assessment procedure and comply to work permit
- Execute gas free inspection, gas measurement and comply to safety regulations before entering enclosed areas

Real case

Oil Carrier D, Crew Injury Incident
- 22:33 on April 17, 2019, at Jangsaengpo Port in Ulsan -

The chief officer who was entering the tank to repair the oil tank gauge fainted from suffocation.
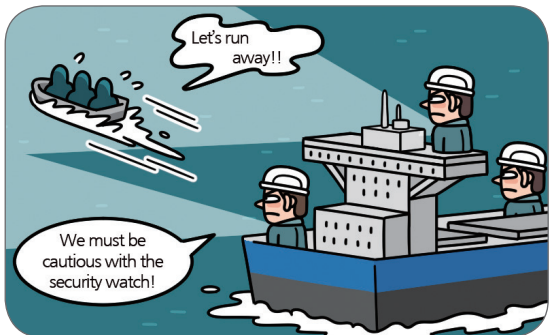
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keep vigilant watch for security on dangerous waters!

A near-invas pirates or thieves at anchorage

While waiting to berth at an anchorage in Indonesia, a boatswain was on a security watch.

Emergency!

Huh? Unfamiliar boat approaching!

Let's run away!!

We must be cautious with the security watch!

Must comply! (Preventive lesson)

- Keep vigilant watch on the bridge (radar monitoring and naked eye watch, etc.)
- Maintain security duty and implement regular and thorough patrol
- Familiarize crew with emergency response to pirates and thieves

Piracy Incident Statistics

Total number of piracy incidents around the world in the first half of 2019 was 78.

In particular, waters near West Africa accounted for 46.2% (36 of 78 cases) of piracy incidents, 72.9% (27 of 37 people) of kidnaps, and 3 vessel hijacking.

Real case

Korean cargo ship attack by pirates
- 04:15 on July 22, 2019 near the Singapore Strait -

7 pirates boarded the ship, assaulted the crew, and left the ship with $13,300 and other belongings.

Relevant Regulations

ARPA, Automatic Radar Plotting Aids
ARPA, Automatic Radar Plotting Aids

1. Installation requirements
(all vessels over 10,000GT built after Sep. 1, 1984)

2. Performance standard (related to the guard zone setting)
- IMO regulation (IMO Res.A.823(19)) and Article 96 of Ship Facilities Standards (announced by Ministry of Oceans and Fisheries)

Used to set approach limits in advance to avoid the ship from coming into close distance with another object, it sets off a visible and audible alarm promptly when an object enters the set limits. It distinguishes the objects at sea and displays them on the screen.

Enclosed Space Entry and Rescue Drills
— International Convention for the Safety of Life at Seat

1. Examples of enclosed spaces (IMO Res.A.1050(27))
- Cargo spaces, double bottoms, fuel tanks, ballast tanks, cargo pump-rooms, cargo compressor rooms, cofferdams, chain lockers, void spaces, duct keels, boilers, engine crankcases, etc.

2. Content of enclosed space entry and rescue drills
- Inspection and use of personal protective equipment required for entry
- Inspection and use of communication systems and procedures
- Inspection and use of equipments to measure gas in enclosed spaces
- Inspection and use of rescue equipments and procedures
- Guidance on emergency measures and resuscitation

Global Counter Piracy Guidance

Do NOT be alone	• Report to the relevant reporting center and register transit • Cooperate with military or other country piracy services • Keep AIS turned on
Do NOT be detected	• Keep track of NAVWARNS and visit relevant websites for known pirate operating locations
Do NOT be surprised	• Increased vigilance – lookouts, CCTV and radar
Do NOT be vulnerable	• Use visible (deterrent) and physical (preventive) ship protection measures • These include razor wire, use of water/foam, etc.
Do NOT be boarded	• Increase to maximum speed • Manoeuvre the ship without severely reducing speed
Do NOT be controlled	• Block access routes • Use citadels