

Note: Print this bulletin in colour and place a copy in the Officer's and Crew's recreation rooms.

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Advisories

New MARPOL special areas

From 1 Jan. 2025, new additional special areas will take effect under MARPOL:

Annex 1 - Oil (Reg. 15.3,15.5 and 34.3 to 34.5) - Red Sea and the Gulf of Aden special areas.

Annex V - Garbage (Reg.6) - Red Sea special area.

Caution: Familiarize your crew on the new additions to the special areas for discharges under MARPOL Annex I and V.

Firefighting suits

The attached ABS circular provides guidance on the requirements of firefighting suits onboard ships as per SOLAS and EU standards.

Caution: Check the condition and certification of fire suits on your ship and confirm its suitability for fighting fires inside enclosed spaces (EN469 level 2). Proximity suits, though complying with SOLAS/FSS, are only suitable for fighting fires in open-air environment.

[Read more...](#)

CCTV requirement for Port Hedland

From 1 Jan. 2025, all cape size ships calling Port Hedland must have a CCTV rudder camera installed in the steering flat.

Install the cameras such that it clearly captures the rudder angles during manoeuvring. Place the monitor in the wheelhouse in proximity of the coning positions.

Caution: Plan the installation of CCTV in the steering flat if calling Port Hedland for compliance before 1 Jan. 2025.

PSC / flag detentions and deficiencies

We bring you details of PSC / flag detentions and deficiencies received on our ships from 1 May to 15 June 2024.

Caution: Please use the attached guidance to avoid PSC observations and detentions.

[Read more...](#)

Sharing best practices and improvement suggestions

We share some of the best practices and 'My Idea' suggestions received from our ship / office staff.

Note: Share your best practices / ideas and learn from others' best practices.

[Read more...](#)

Safety Notifications

Fire in pump room

A fire broke out in the pump room of our Oil tanker while she was undergoing repairs at Ras Laffan shipyard in Qatar.

Caution: Report and reassess the risks when there is any deviation in the work plan agreed in the daily meeting with the DD / shipyard.

[Read more...](#)

Stern tube oil leak

While on passage, the crew on our bulk carrier received stern tube sealing system low level alarm and found the tank oil level falling.

Caution: During repairs of stern tube seals of this type, reiterate to the service engineer the importance of proper tightening of the distance piece.

[Read more...](#)

Emergency fire pump failure

During a routine test on our ship, the emergency fire pump failed to deliver the required discharge pressure of 4 bar.

The ship continued to operate without an emergency fire pump for 90 days without reporting to flag / port authorities / owners.

Caution: Familiarize crew with the importance of always maintaining critical equipment in good condition.

[Read more...](#)

Health

Weight loss exercise – Cardio vs. Strength training

Discover the best exercises for weight loss: cardio vs. strength training. Learn which workout method can help you shed pounds faster and achieve your weight loss goals efficiently.

Caution: Obesity is the leading cause of many health issues and cardiovascular diseases such as heart attack, stroke, heart failure, diabetes, and high cholesterol.

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INDUSTRY REMINDER ON FIREFIGHTING SUITS

It is essential for shipowners to equip their crew with suitable firefighting gear to ensure the preservation of lives and vessels in the event of a fire. The appropriate equipment should enable crew members to effectively combat fires in open-air environments and enclosed spaces, all while ensuring their personal safety.

PSC PERSPECTIVE

Port State Control Officers (PSCOs) have repeatedly issued deficiencies against the Maritime Labour Convention (MLC) when firefighting suits lack the appropriate certification for firefighting in enclosed spaces. PSCOs on numerous interventions have stated that proximity suits, which are designed for open-air firefighting, do not offer adequate thermal protection against radiated heat when entering enclosed spaces where a fire is present. As proximity suits are compliant with the International Convention for the Safety of Life at Sea (SOLAS) and the International Code for Fire Safety Systems (FSS Code), it is the opinion of some PSCOs that they may only be utilized for supportive tasks such as boundary cooling.

Some PSCOs are inferring that proper firefighting clothing should provide a level of protection at least equivalent to the gear worn by the crew during exercises for obtaining the Seafarers' Training, Certification and Watchkeeping (STCW) Code A-VI/1 Basic and STCW A-VI/3 Advanced firefighting certifications.

INTERNATIONAL REQUIREMENTS

SOLAS Chapter II-2 Regulation 10 mandates the minimum number of firefighting outfits on board ships. According to Reg.10.10.2, all ships must carry at least two outfits (Reg.10.10.2.1), with additional suits required for passenger ships, gas carriers and tankers (Reg.10.10.2.2). Additionally, Reg.10.1.1 stipulates that firefighting outfits must comply with the FSS Code, detailed in Chapter 3, which outlines engineering specifications for personnel protection.

SOLAS Ch.II-2/Reg.10.10.2.1	All ships must carry at least two outfits
SOLAS Ch.II-2/Reg.10.10.2.2	Additional suits required for passenger ships and tankers
SOLAS Ch.II-2/Reg.10.1.1	Firefighting outfits must comply with the FSS Code
FSS Ch. 3	The personal firefighting equipment shall include "protective clothing of material to protect the skin from the heat radiating from the fire and from burns and scalding by steam. The outer surface shall be water-resistant."

KEY NOTES

- Requirements, limitations, and recommended actions.
- References:
 - SOLAS Ch.II-2 Reg. 10
 - FSS Code
 - MLC Reg. 4.3
 - Regulation (EU) 2023/1667

MLC Regulation 4.3 / Standard A4.3 serves as a legal framework for promoting health and safety protection and accident prevention within the maritime industry. It establishes a baseline for these essential aspects, while the flag Administrations are responsible for enacting specific MLC compliance requirements through their respective national legislation. MLC 2006 *Guideline B4.3 - Health and Safety Protection and Accident Prevention*, although non-mandatory, mentions that firefighting should be addressed and highlights the importance of considering the International Labour Organization (ILO) code of practice titled *Accident Prevention on Board Ship at Sea and in Port, 1996* as a reference for occupational safety and health protection. Notably, the ILO code provides guidance on conducting fire drills and identifies enclosed spaces such as engine rooms and accommodation spaces as critical locations for fire scenarios.

FIREFIGHTING SUIT STANDARDS

Many suits on board are designed in accordance with the EN 531 standard. However, this standard is designed for industrial workers exposed to heat and is not intended for firefighting. Moreover, some suits labeled under EN 531 feature unprotected metal zippers, buttons or clasps, which can conduct heat and cause burns.



Figure 1: Suits with unprotected metal buttons do not provide the necessary thermal insulation.

A protective suit meeting the demands of firefighting is one complying with the European standard EN 469:2005, as noted below. Level 2 is required for firefighting in enclosed spaces. EN 469:2005 and its revised version EN 469:2020 also mandate a risk assessment to be made.



Figure 2: EN 469:2005 and EN 469:2020 performance level pictograms.

EN 469:2005	Suits are classified into performance level 1 or level 2 using four criteria indicated by a pictogram: • Resistance to convective heat (Xf1 or Xf2) • Resistance to radiant heat (Xr1 or Xr2) • Resistance to water penetration (Y1 or Y2) • Water vapor resistance (Z1 or Z2) Suits labeled as level 1 or level 2 are common in the market. Level 1 is limited to outdoor firefighting and support activities, while level 2 is recommended for firefighting in enclosed spaces or structures with higher fire risk. Only suits with Xf2, Xr2, Y2 and Z2 are considered level 2 suits. The resistance of the garment to water penetration is determined by its hydrostatic pressure properties, while the water vapor resistance is associated with its breathability. The use of high-visibility materials in the garments is not mandatory, but if included, they must meet the thermal and high visibility requirements specified in the standard.
EN 469:2020	The European standard for firefighter protective clothing, EN 469, underwent revisions in 2020. Based on the updated standard EN 469:2020, there are three criteria classified as level 1 or level 2: • Thermal Performance (X1 or X2) • Water Penetration Resistance (Y2 or Y2) • Breathability/Water Vapor Resistance (Z1 or Z2) Specifically, the difference in Water Penetration Resistance is that level 2 (Y2) fire suits include a moisture barrier, while level 1 (Y1) fire suits do not. It's important to note that both types of fire suits, with or without a moisture barrier, are approved according to EN 469:2020. In the updated standard, performance levels are exclusively determined by a garment's thermal performance, with X now representing both radiant heat and flame contact heat. Level 1 meets lower requirements suitable only for outdoor firefighting, while Level 2 meets higher standards necessary for structural firefighting operations, including indoor and enclosed spaces. Notably, the garment's pictogram still includes grades for resistance to water penetration and water vapor to provide an indication of performance.

Below is a list of other frequently encountered standards for firefighting suits found on board:

- EN 1486 (Europe)
- ISO 15538 (International)
- NFPA 1971 (USA)
- NISTIR 7467 (USA)
- GA 634-2015 (China)

Due to the different requirements of every country, there are some differences between standards. Before purchasing suits according to a specific standard, it is advisable to read the test methods and minimum performance requirements of the specific standard. In addition, standards such as EN 469 and ISO 15538 emphasize the significance of conducting a risk assessment.

ADDITIONAL REQUIREMENTS FOR EU VESSELS

European Union (EU) ships (i.e., ships flagged by a member State of the EU) must comply with the Marine Equipment Directive (MED). The MED requires new protective, non-reflective firefighting clothing to meet either EN 469:2005 or EN 469:2020 until 25 August 2024. After this date, only EN 469:2020 should be purchased. Existing equipment need not be replaced if remaining in good condition. The MED does not stipulate a specific required level of EN 469 for firefighter's protective clothing, allowing both level 1 and level 2 to be considered compliant.

EMSA GUIDANCE

In 2022, the European Maritime Safety Agency (EMSA) released guidance for the safe transportation of Alternative Fuel Vehicles (AFVs) in ro-ro spaces of cargo and passenger ships. The guidance recommends that firefighting suits comply with EN 469:2020, and specifically suggests a classification level 2 for all three criteria, including Water Penetration Resistance (Y2).

REQUIREMENTS FOR SOLAS VESSELS

Unless a flag provides additional requirements for firefighting suits, there are no limitations on the use of a firefighting suit complying with FSS Chapter 3 on a non-EU flag vessel. It is to be noted that the FSS Code Chapter 3 does not provide any specific details on the actual requirements that the firefighting suit is to comply with, or time/temperature delta at a specific radiant heat or temperature/pressure of scalding steam, to protect the skin from the heat radiating from the fire and from burns and scalding by steam.

RECOMMENDED ACTIONS

Operators are encouraged to check the condition and certification of the fire suits available on board and to conduct a risk assessment to confirm the suitability of the fire suits for firefighting scenarios that could be encountered, including outside on-deck firefighting, inside accommodation and/or other enclosed spaces.

Although not stated in the EU-MED, the correct firefighting suit standard for firefighting inside enclosed spaces (e.g., accommodation, engine room, etc.) is EN469 level 2.

- In EN 469:2005, all performance criteria (Xr, Xf, Y and Z) should be level 2 for the suit to be classified as level 2. If one of the performance criteria is level 1, then the suit is no longer level 2.
- In the updated standard, EN 469:2020, the performance level is determined solely based on performance criterion X. If X is X1, then the suit is categorized as level 1. Conversely, if X is X2, then the suit is classified as level 2.

It is suggested that if fire suits available on board are not suitable for firefighting inside enclosed spaces, to record this in the ship's SMS for crew awareness and to ensure that additional suits suitable for firefighting inside enclosed spaces are available on board. Some local PSCOs require the replacement of the suit when the performance standard Y and/or Z is level 1 based on the intent of the MLC

Regulation 4.3. Most PSCOs are also accepting other suitable standards than EN469, including ISO 15538, NFPA 1971, NISTIR 7467 and GA 634-2015.

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We bring you a summary of the PSC / flag detentions and deficiencies recorded during the period from 1 May to 15 June 2024. This is a continuous feature we carry in every BSM bulletin as a part of our efforts to improve our PSC performance.

We had no PSC detentions during this period.

Summary of PSC / flag state deficiencies received in this period:

Category	PSC deficiencies
Certificates / Documents / Records	• Form 2 and Form 3 for all CSR documents on board missing • No RA for sea water pipe repairs in engine room • Port contact points, familiarization records and oil inventory not updated in SOPEP • Chief engineer not signed engine logbook for more than a week • Flag endorsement not available for Chief officer's CoC for a period of 7 months
FFA / Fire detection / Fire plans / Muster list / Drills	• PA system for lifeboat muster station portside, speaker is not working • Wooden blocks inserted on quick closing valves LSFO 5 P and S, preventing remote closing • Smoke detector above boiler hot well covered with rags disrupting operational readiness • CO₂ nozzle painted over in the cargo pump room • Fire hose box did not have the required spanner • Testing equipment not available for flame detectors and water mist system • Fireman outfits helmets neck protection found holed and wasted heat protection
Fire doors / dampers / divisions / QC valves	• Fire door in galley kept open by rope during inspection • 2 pcs fire damper of ventilation seized in E/R and not closing during inspection • Wooden blocks inserted on quick closing valves LSFO 5 P and S, prevent remote operation • No.3 AE fuel isolation valve unable to be reset • One of the two international shore connections was incorrect type • Self-closing fire doors between ER and accommodation not closing fully
LSA	• FWD life raft embarkation illumination arrangements not in accordance with SOLAS Chapter III Reg 16.7 • Lifejackets onboard not provided in accordance with LSA Code as Amended Lifejacket sizing criteria • Rescue boat outboard engine discharging excessive oil into the water • Rescue boat launching device upper limit switch defective • Free fall lifeboat windows found with not clear visibility from steering position • Compass for freefall lifeboat malfunctioning • Reflective tape on free fall lifeboat damaged • Safety hook of lifeboat malfunction • Corridor to reach port side lifeboat found obstructed with several plastic trays
Cargo / Deck	• Vessel DG list with container UN NO.1950 class 2.2(6.1)/SP 63 not matching with DG declaration • Main deck, both sides manifold found with corrosion and lack of maintenance

Navigation / Radio / Steering	• The sound power telephone alert alarm (light and sound) not functioning • Arc's of visibility of not under command lights not in accordance with COLREG • VDR showing error of no connection • Port side upper navigation light is not working • Total tides not updated on back up station • Monkey Island radio antenna without high voltage danger warning sign • Speed log not working • The handrails of working access to steering gear machinery and controls not provided
Mooring	• Port windlass lower brake pin parted and caused the brake jaws to open, anchor chain when released reached bitter end causing structural deformation to chain locker
Main / Aux. engines	• Oil mist detector control panel showing system failure on cylinders 2 and 3 • Aux. engines 1 and 2, filter laggings soaked with fuel • M/E local tachometer indicated 3 degree (3 revolutions) during engine stop • AE 3 not working because of oil mist detection alarm • Fuel oil leaks on ME no. 6 high pressure fuel pipe • Double jacketed fuel lines on cylinders 1, 4, and 12 were frayed and exposing the internal line. • AE2 and 3 found with exhaust leakages and damaged insulation
MARPOL – Oil pollution / Fire hazard	• LO purifier heater has oil leakages • Vessel did not have oil transfer procedures • Flexible hose on air compressor auto drain in 55 gallon drum in ER 1/3 full of oil
MARPOL – Sewage	• No chemical tablets in the dosing tubes of the sewage treatment plant
MARPOL – Garbage	• Familiarization records and garbage capacity plan not updated in GMP • No signature of crew in charge of operation in the GRB for incineration of garbage
Electrical	• Found several lights on deck and in cross bays not working • Some electrical panels on main machine and steering flat do not have rubber insulation on the floor • Earthing faults in battery charger room • Emergency generator cooling water pressure gauge defective
MLC / Rest hours / working and living conditions	• Crew member on board with expired employment contract • OS employment contract overdue, more than 11 months on board
Load line / stability	• Midship draft marks faded • Colour of port side deck-line marking not complying with the load line convention • Plimsoll mark rusted and not fully painted

Action points:

- Take precautions as per the alerts posted in InfoPoint for various trading areas
- Discuss the above deficiencies in your monthly safety meeting / training sessions
- Contact your MSI immediately when PSC arrives on board and if you need shore assistance to rectify any deficiency
- Use the below reference material to improve your PSC performance

- PN 02/2021 Port State Control Inspection Performance Improvement
- BSM Bulletin - PSC article in every issue starting from 04/2021
- PSC Watchlist poster 2024 in QDMS
- PAL BI - Fleet Management - Inspection – PSC (office only)

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Attachment to BSM Bulletin 04/2024 – Sharing “Best practices and improvement suggestions”

We bring you some of the best practices shared recently by our ships. Refer to BSM Bulletin 04/2021 for details of this initiative. Also included are some improvement suggestions that we received through My Idea PAL. Please review and adopt these best practices on your ship, where suitable.

Due to size restrictions of this bulletin, we can only share a few selected best practices and ideas. We thank the ship staff for their contributions.

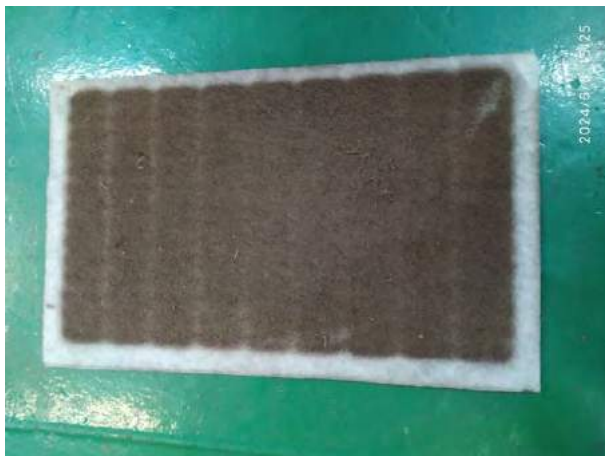
Best practices:

1) Mieke Schulte:

- a) Officers prepare for jobs well ahead of time. A good example is the 2/O preparing for the voyage route and equipment. We are creating route via ECDIS which we use to monitor the vessel during the entirety of the voyage. But, we also have "SEATAB" which is a tablet that has a program same as ECDIS and is more convenient to use during maneuvering operations (Arrival/Departure from port).



- b) Reusing air filters after washing



Air filter – Before washing



Air filter – Washed and reused

Attachment to BSM Bulletin 04/2024 – Sharing “Best practices and improvement suggestions”

Improvement suggestions from My Idea PAL:

Here are some of the ideas received through My Idea PAL. These are reviewed by subject matter experts and if accepted are converted into projects for further development or incorporating into the company’s management system. Consider these ideas for implementation onboard after discussion with the management team.

Idea	Problem	Benefits	Office Comments
To install CCTV in the engine room at various locations to view - Main engine tops, Aux engine platform, purifier room, funnel exhaust pipes flue gas. vessel view fwd (Loizos Nicolaou – CY SMC)	Remote monitoring of machinery areas is not possible	a. Reduces impact from an incident due to early response b. Provide live data in the area where the incident has occurred c. Provides evidence for insurance purposes / incident investigation /preventive actions	a. Adding extra cameras should be low cost since all ships have the OWS CCTV system b. Can run this as a pilot in CY SMC before rolling out on all ships c. Will require owner’s approval and this may be a hindrance in making it mandatory
Placing extra bin in common area like galley and mess room for segregation and further subcategory of domestic waste with glass or other sharp objects. Also avoid ordering glass bottles like beer case. (Harsh Rungta)	Presence of glass or sharp object along with other domestic waste in garbage might result in injury (Minor / deep cut of skin) of crew member during handling or compacting or landing ashore of domestic waste.	Reduces likelihood of injuries	This is a simple idea with low cost that will provide a greater degree of crew safety when collecting and handling garbage. What is not covered is how this garbage will be landed - the containers used to collect it will not be landed so we face a weak link in the process where all this material gets put into garbage bags for landing ashore. This negates the benefit of the idea.

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What happened:

Our oil tanker was alongside Ras Laffan Shipyard, Qatar for repairs. A fire broke out in the cargo pump room adjacent to an area where yard workers were conducting hot work.

The following jobs were ongoing inside the pump room when the fire broke out:

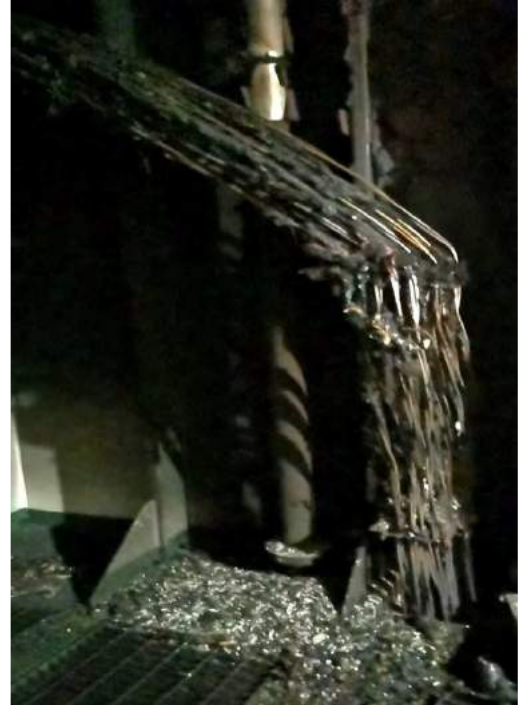
- Welding of the support angle bar in the floor panels / gratings
- Preparation for pressure test of the cargo lines, by filling up with water and checking for leaks

Consequences:

- Structural and machinery damage
- Delays in completion of repairs / ship back in trade
- Potential injuries / property damage / delays

Causes:

- Other external party not under the control of the company
 - Shipyard personnel were carrying out jobs inside the pump room against the agreed timeframe. They were also not following the sequence of activities, which was set during the morning meeting with Owners, Managers, and the ship
- Failure to follow procedure / instructions – Ship's crew did not:
 - Report / inform the vessel HoD and Office for the observed breach of original timeframe of jobs inside the pump room
 - Intervene / exercise the stop work authority when they observed shipyard personnel carrying out hot work outside the agreed timeframe
 - Conduct drydock risk assessment
- Inadequate guard / barrier:
 - Pipe insulation had not been covered with a fire blanket or any other protection despite the fact that the welding of the support angle bar in the floor panels / gratings was in close vicinity
 - Cargo suction valves of pumps no. 1, 2, 3 failed to hold tight after repairs. During preparation for the pressure test, the cargo lines were filled with water and shortly after the specific valves start leaking inside the Pump Room
- Poor housekeeping / disorder - Shipyard personnel carrying out the hot work job did not keep the surrounding area in order or well protected against fire risks. The hydraulic pipes in the vicinity had flammable insulation material capable of burning rapidly once ignited
- Lack of supervision / management job knowledge - The Pumpman and OS were inside the pump room but failed to report to the senior officers / TSI when hot work continued outside the agreed time / scope



Burnt fittings inside the pumproom

- Inadequate identification of legal requirement - BSM representatives were not liable to sign any contract / agreement with the Yard. All arrangements were carried out by Owners and any signed agreement between Owners and Yard was not made available to BSM

Lessons learnt:

- Discuss the incident in your next safety meeting including shipyard related:
 - Requirement of keeping HoD and office representatives informed on any deviations of the agreed work plan
 - Hot work practices
 - Liability during dry docking / afloat repairs in shipyard, according to Owners and Managers agreement
- Conduct onboard training on the usage of the stop work authority. Encourage and ensure active use of the stop work authority and unsafe act / condition reporting
- When planning drydock / shipyard repairs, BSM representatives must discuss with Owners:
 - Structure of drydocking
 - Arrangements / responsibilities related to shipyard safety
 - BSM policy and procedures
 - Liability during dry docking / afloat repairs in shipyard facilities according to Owners and Managers agreement

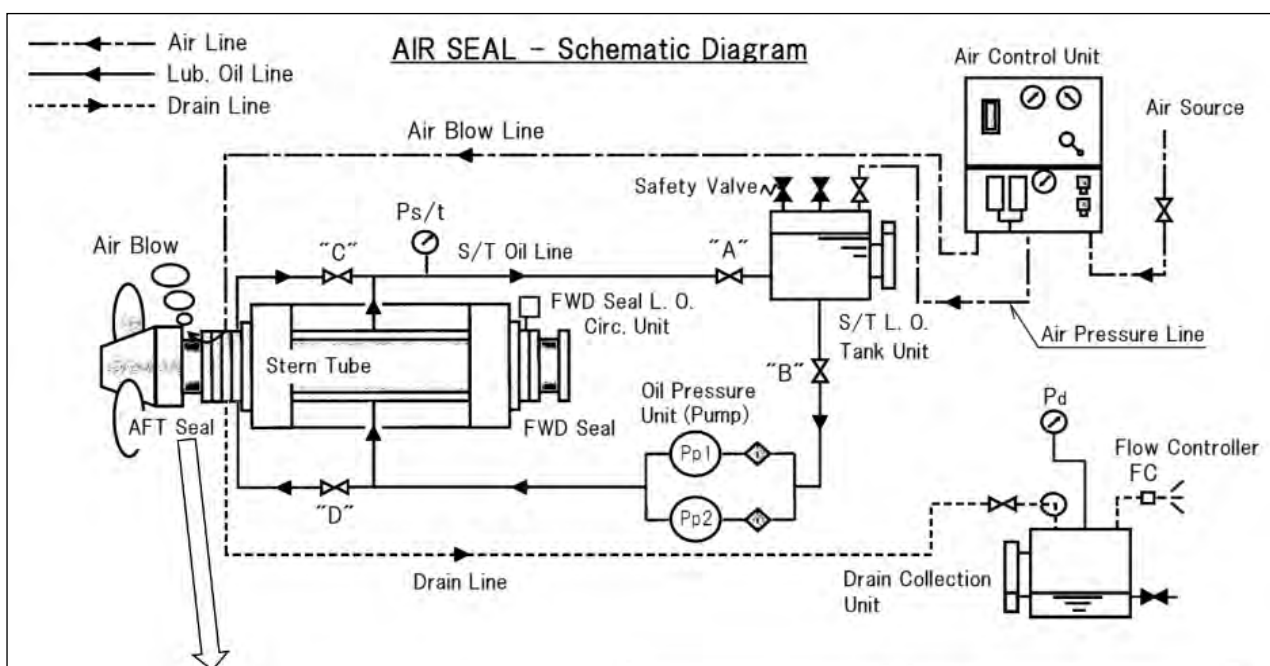
Note: Communicate to the ship the outcome of above meeting, conclusions and agreements that may affect the ship's operations during the stay in DD / repair yard.

What happened:

The crew on our Supramax bulk carrier received stern tube sealing system (STSS) low oil level alarm and found the tank oil level reducing. They inspected the engine room thoroughly but could not find any leaks and thus suspected that the oil was escaping into the sea.

An 'air seal' in the STSS keeps sea water out by blowing air into sea through an air chamber provided in the space between the no. 2 and 3 aft seal rings. Segregation of sea water and stern tube oil by air chamber minimizes the risk of sea water contamination.

STSS Makers: Kemel

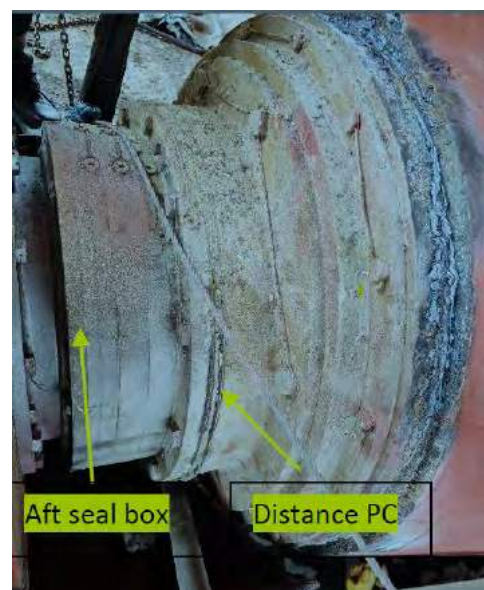


Consequences:

- Loss of oil – total about 1163 litres
- Pollution
- Delay / Off-hire
- Cost of repairs

Causes:

- Defective equipment - The distance piece gasket adjacent to the stern tube seal box was found damaged
- Inadequate adjustment / assembly - During the recent DD of the ship, the maker's service engineer did not adequately tighten the nut / bolts of the distance piece adjacent to the stern tube seal box



Lessons learnt:

- During stern tube repairs / seal renewals, pay attention and reiterate to the makers engineers the importance of proper tightening
- Discuss the incident and familiarize your engineers with the operation and maintenance of the stern tube oil system fitted on board

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What happened:

During a routine test on our ship, the emergency fire pump failed to deliver the required discharge pressure of 4 bar for firefighting.

The ship continued to operate without an emergency fire pump for 90 days and without reporting the failure to the flag state, port / terminal authorities and owners.

Consequences:

- Repair costs
- Risk to the ship and crew safety

Causes:

- Inadequate servicing of equipment - The mechanical seal was leaking and the pump casing / frame was corroded indicating lack of maintenance
- Inadequate work planning:
 - No spares for the emergency fire pump were available for maintenance of the emergency fire pump
 - Lack of maintenance plan considering there were no records of maintenance available since the ship was taken over in April 2022
- Condone deviation from policy / procedure - The fleet team continued ship operation without an approval from the flag for the failed emergency fire pump.
- Lack of situational awareness / risk perception / risk awareness:
 - No proper maintenance manual for the emergency fire pump on board and in office
 - The ship engineers / fleet team failed to maintain the emergency fire pump in working condition, despite being a critical equipment
 - The fleet team and the ship failed to understand the risk associated with operating the ship without an emergency fire pump.

Lessons learnt:

- Ensure that the ship has a proper instruction and maintenance manual for all equipment, especially critical equipment like emergency fire pump
- Keep the PMS maintenance instructions and history updated for all equipment
- Provide training to all ships' senior officers and fleet team members on the company requirements for:
 - Flag state dispensation requests
 - Management of critical equipment
 - Risk management and equipment failure notifications

Attachment to BSM Bulletin 04/2024 – Weight loss exercise – Cardio Vs Strength training to lose weight faster

Obesity is the leading cause of many health issues and cardiovascular diseases such as heart attack, stroke, heart failure, diabetes and high cholesterol. Obesity can also cause improper sleep, mental health issues etc. Maintaining a healthy body weight is crucial for overall health and well-being.

Losing weight is not everyone's cup of tea if you don't know about calorie deficit and the right exercise. But when you start your journey of weight loss you may wonder what you must do in exercise, whether you go for cardio or strength training. Both the exercises have benefits but you must find what suits you best.

This article will find a solution to your queries regarding the confusion between cardio and strength training.



What is cardio?

One of the best cardiovascular exercises is cardio, as this exercise helps to improve heart health and rate. This exercise can help you in losing weight by burning calories and fat. You can include exercises like swimming, hiking, biking and running. The harder you exercise, the more calories you burn and it helps you to enhance your body size.

What is strength training?

Strength training like weight lifting, using resistance bands will help your muscles work against force which helps to enhance your metabolism, elevate your muscle strength. This training helps you to burn calories, especially after a workout.

Differences between cardio and strength training

- **Strength training** - This training helps to enhance metabolism and helps to build muscles
- **Cardio** - This exercise helps to burn calories and improve heart health

These types of exercise are very helpful for overall health, fitness and well-being and both exercises work in different ways. Both types of exercise are important for overall fitness, but they work in different ways.

Benefits of cardio

- **Improve heart health** - It helps to increase your heart rate, and enhance your heart function which helps to reduce the risk of heart diseases
- **Easy to start** - These exercises are very easy to start without any equipment as you can just start this exercise by walking and running
- **Burns calories quickly** - Cardio is a very effective exercise to burn calories
- **Boosts immunity and brain health** - Cardio helps to enhance immunity and brain health which helps to improve sleep, reduces the chances of heart attacks, stress and also reduces the chance of high blood pressure
- **Strengthens bones** - Hiking can help you to enhance your bone strength

Attachment to BSM Bulletin 04/2024 – Weight loss exercise – Cardio Vs Strength training to lose weight faster

Benefits of strength training

- **Improve brain health** - Strength training helps you to enhance your memory and also processing speed in adults
- **Boosts metabolism** - It helps you burn the calories even if you are resting
- **Protect joints** - Strength training - It helps you to strengthen muscles of the joints which reduces the risk of Injury
- **Increase bone density** - This helps to reduce the risk of osteoporosis by increasing your bone density
- **Manages chronic disease** - Strength training also helps to reduce diabetes, arthritis, heart disease and obesity

How often should you exercise?

Workout routine completely depends upon your goals, experts suggest 6 days of workout and one day for rest so that your muscles can recover. Including two days of cardio and 3 days of strength training works best for anybody. If you are prioritising endurance you can opt for 3 days of cardio.

It is important for you to include both cardio and strength training in your routine to achieve a healthy body and goal.

Source: *HealthSite.com*

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