

Safety awareness whilst performing routine tasks

Over recent years, many changes have taken place in the workplace to increase the safety awareness of both employers and employees. However, incidents still occur, due to crew complacency and error.



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The impact of ISM

The introduction of ISM in 1994 into the maritime industry has increased safety standards immeasurably. Companies have effectively implemented the key objectives of ISM to increase safety on board ships, notably:

- the implementation of safe working practices and working environment
- the establishment of suitable safeguards against identified potential risks
- a proactive approach to the continuous improvement of the safety management skills of personnel, including emergency response plans for both safety and environmental protection.

The implementation of the basic five-steps rule when approaching any task has also significantly improved the general safety culture. Companies tend to create their own individual procedures, whilst retaining the basic elements:

1. **Stop** – Think and understand what is involved in carrying out any individual task.
2. **Look** – Identify any hazards.
3. **Assess** – Identify what damage could be caused by these hazards.
4. **Manage** – Implement safety measures/controls, ensure that all persons involved in the task understand the work scope, what hazards are present and what safety measures are in place.

5. **Safely** – Complete the task in a safe manner then assess the work process used to identify any areas of improvement considered appropriate (lessons learnt) to develop best practices.

However, whilst there is a high level of compliance with company safety procedures when performing high-profile tasks, this same safety awareness does not seem to be as prevalent when crews are completing tasks considered routine or mundane. The Standard Club believes a general complacency amongst crews leads to a loss of perception of the risks involved, leading to the bypassing of company safety procedures. Consistently following the five-steps rule for every task will help identify the hazards present and prevent potential incidents.

Case Study 1

A recent claim case, briefly described below, clearly identifies where a potential case of complacency and failure to follow company procedures whilst performing a routine maintenance task led to personal injury.

Background

A junior ranking engineer suffered second-degree burns to his arms and legs whilst attempting to tighten down the gland packing of a boiler feed water valve. The boiler was still in operation at the time and associated pipelines/systems were still pressurised. It was reported that this action had not been discussed with senior engineers, and no job-specific toolbox meeting had been held nor had the matter been identified during previous routine toolbox meetings. No risk assessment was undergone for this task.

The investigation report highlighted that the gland bridge had previously been tightened down unevenly, which had resulted in the packing material not being compressed properly allowing leakage past the valve stem/packing. As the junior engineer started to tighten down on the gland nuts, there was a substantial leakage in way of the gland bridge and valve stem. Due to restricted access, the engineer had chosen to squat around the valve, thus the resulting leakage caused extensive burns to his legs and arms.

Lessons learnt

In this particular case study, if the five-steps rule had been followed and the company's safe working practices complied with, including a toolbox meeting with risk assessment, then potential hazards would have been identified. By utilising the knowledge and experience of the senior engineers on board, the extra precautions needed would have been highlighted, which could have prevented the incident.

A proper evaluation of the task would have identified: the need for the immobilisation of the boiler unless secure/tight double-valve segregation could be assured; the need to depressurise/drain the associated pipeline/system; the requirement for appropriate PPE; and the need for an evaluation of the valve position/location in order that the safest, most suitable work position could be found to complete the task. A full risk assessment would have been created to ensure all hazards had been identified and suitable safety processes/measures put in place.

This is a prime example of complacency overruling the ship's safety culture and company procedures because the task was considered to be routine and relatively mundane.



The lessons learnt from this case study reinforce the need for safety awareness by all seafarers whenever approaching a task however big or small it may be.

Case Study 2

Another recent claim, briefly described below, clearly identifies where failure to ensure that all equipment is regularly inspected and maintained in safe full operational status can lead to a personal injury. This case study also highlights the safety requirement to carry out a toolbox meeting prior to commencement of any task.



A review of PSC inspection records shows that failure to maintain the full operational status of lifesaving and firefighting equipment through scheduled or routine inspections and maintenance remains one of the most frequent, repeated defects or observations recorded during PSC inspections worldwide, on all types of vessels.

Background

The incident took place during night-time cargo operations, in intermittent light rain. The ship's crew had installed portable halogen lights to assist stevedores unlash containers and had been requested by the stevedores to relocate them as work progressed. A stevedore, instead of waiting for the ship's crew, attempted to move one light while it was still connected to the power supply. The casing of this particular light was damaged and the cable connection had a temporary taped sealing arrangement. Rain had leaked into the light resulting in the stevedore receiving an electrical shock. Fortunately, the shock was not fatal and the stevedore was released from hospital after 24 hours, but he experienced chest pains for some

time afterwards. After the event, the stevedores' management company held a toolbox meeting and confirmed that its personnel would not have been expected to move any portable lighting equipment and should have waited for crew instead. The incident investigation established that there was no inspection/maintenance schedule in place for this type of equipment, only an inspection by the ship's crew prior to use.

Lessons learnt

This case study highlights the importance of keeping inspection and maintenance registers on board all ships. A suitably qualified person in charge must ensure that any damaged appliances are either repaired or withdrawn from service and replaced. It is not adequate to simply rely on quick inspections prior to use by unqualified crew members.

Additionally, a toolbox meeting should be held with shore workers prior to the commencement of cargo operations to agree who is responsible for relocating the portable lights and the correct operating procedures (eg disconnection from power supply prior to moving). If that meeting had taken place in this scenario, it is reasonable to assume that the injury would not have occurred.

Conclusion

There can be no doubt that there have been significant improvements in safety awareness amongst seafarers over recent years. However, injuries are still occurring, and they are particularly prevalent when crews are carrying out routine tasks. The Standard Club believes this is mainly due to complacency overriding a seafarer's compliance with company ISM procedures. Regular, comprehensive safety training courses should highlight this issue and reinforce the necessity to follow safe working procedures at all times, however big or small the task is. By this continued emphasis on maintaining a strong safety culture and awareness on board when approaching and performing all tasks, there should be further reductions in both the frequency and severity of injuries associated with completing routine tasks.