

AS PART OF THE CASE STUDY MATERIAL, THE FOLLOWING COMMENTARY PROVIDES FURTHER ANALYSIS OF SOME OF THE KEY ISSUES TO SUPPORT REFLECTIVE LEARNING.

The first two pages of this commentary discuss some of the contributory factors and lessons learned in more detail with reference to best practices. The final page graphically illustrates some of the barrier control measures that could have potentially mitigated against the risks associated with the hazards by making use of Britannia's interpretation of the Hierarchy of Barrier Controls triangle as a framework.

ACCIDENTAL RELEASE OF LIFEBOAT

SINCE THE INCIDENT THE AMENDMENTS FOR THE SAFETY OF LIFE AT SEA CONVENTION (SOLAS) REGULATION III/1.5 HAVE COME INTO FORCE, REQUIRING THAT LIFEBOATS ON-LOAD RELEASE GEAR ARE TO BE REPLACED IF THEY DO NOT COMPLY WITH THE PROVISIONS OF THE LIFE-SAVING APPLIANCES CODE NO LATER THAN 1 JULY 2019, AND THEREBY MAKING THE USE OF FDPS OBSOLETE. THEREFORE, A SIMILAR INCIDENT SHOULD BE LESS LIKELY TO OCCUR TODAY. HOWEVER, THE CONTRIBUTING FACTORS AND LESSONS LEARNED ALSO INDICATE THE FAILURE, OR ABSENCE, OF SEVERAL RISK CONTROLS AND A SUB-OPTIMAL SAFETY CULTURE, AS DISCUSSED BELOW.

SAFETY CULTURE

The investigation concluded that the management of safety was ineffective on board and there was evidence of a poor safety culture both on board and in the management of the company. This became obvious during the fire and boat drills required by the PSCO, where the crew's performance was regarded as being very poor. Furthermore, the safety committee meeting conducted after the incident made no mention of it and the investigation conducted by the Managers did not provide any action plan to improve performance. Following the incident the ship's classification society also undertook an audit of the ship's ISM system: this identified three major non-conformities relating to the crew's emergency response.

In a deficient safety culture even the best efforts of one individual may still be insufficient to ensure safety as this requires a concerted effort from all involved. An effective safety culture leads to an organisation where the shared beliefs and behaviours from the top to the bottom result in all employees feeling responsible for their actions to improve safety and performance. Both managers and crew fulfil a key role in creating, embedding and driving forward a strong onboard safety culture.

TRAINING

The fire drill required by the PSCO during the PSC inspection revealed an obvious lack of crew training, and the PSCO described the crew's performance as being "complete unsatisfactory". The boat drill that followed also showed that the crew lacked understanding of how the lifeboat's on-load lifeboat release and retrieval system (LRRS) should be operated which later became a contributing factor to the incident. According to the ship's records, monthly drills had been conducted as required by the SOLAS convention. However, evidence obtained during the investigation indicated that the records were falsified and the lifeboats had not been lowered into the water for at least a year before the incident.

Proper training is essential for the safe operation of any ship. Training not only provides the crew with the correct skillset in order to safely operate a ship without incident, it also familiarises them with the risks associated with the various shipboard operations, and thereby increases safety awareness. Furthermore, the MAIB Safety Study of Lifeboat Launching Systems [<https://www.gov.uk/government/publications/lifeboats-and-launching-systems-accidents-review>] found that the safe operation of LRRSs can only be achieved through crew training in the specific gear fitted on their vessels.

ACCIDENTAL RELEASE OF LIFEBOAT

STOP WORK AUTHORITY

The incident could have been prevented had the lifeboat crew and the two men assigned to assist the bosun with securing the lifeboat challenged the decision making of the C/O.

The crew should always be able to apply their critical judgement when it comes to the safety of the work environment and stop the work at any time if they observe a condition or activity that is perceived to be unsafe. This can be supported by a Stop Work Authority (SWA) programme providing all crew members with the responsibility and obligation to stop work in case of an apparent unsafe condition or behaviour. A successful SWA programme should enable the crew to use this authority without retribution and therefore contribute to an effective onboard safety culture.

LEADERSHIP AND COMMUNICATION

The C/O had instructed the bosun to secure the lifeboat. However, when he arrived at the workplace the C/O instructed the men assisting the bosun to release the FPDs which was contrary to the instruction from the bosun that these were not to be released until he had secured the gripes. Once more the C/O was not challenged even though the bosun was in a dangerous location when the FPD was released. Although the C/O was probably unaware of the instructions issued by the bosun, it reflects poor leadership to issue commands without first consulting the bosun, who he had tasked with the responsibility of securing the lifeboat.

Both good communication and clearly defining responsibilities are essential parts of safe working practices. Even though a work task may seem simple and even routine, it remains essential that the work is thoroughly assessed before commencement. This includes preparing a risk assessment and conducting toolbox talks as required by the company's SMS to ensure everyone involved is fully aware of their responsibilities during the work and any immediate risks.

PLANNED MAINTENANCE

Comprehensive maintenance schedules for the lifeboats and the LRRS had been incorporated into the vessel's SMS but it became evident during the investigation that, even though the maintenance records indicated that the equipment had been "checked" and found in a good condition, this was not the case. The moving parts of the hook release mechanism were dirty and the reset indicator had been painted over. Additionally, the release gear cables were found damaged. The release gear on the starboard lifeboat was found in a similarly poor condition and, during a drill held three days after the incident, it required an hour of effort to free it. Correct and proper maintenance of all shipboard equipment is essential in order to maintain a safe operational ship. Furthermore, the assigned crew need to be trained accordingly so the maintenance is conducted to the highest standard in line with statutory, manufacturers' and the company's own requirements.

FATIGUE

Although not identified as a direct contributory factor to the incident, it was noted that several of the crew, at the time of the incident, had been on board for more than 12 months and some for more than 19 months. Extended periods of employment may lead to long-term fatigue and may affect, not only on a person's wellbeing, but also safety.

SEE NEXT PAGE FOR HIERARCHY OF BARRIER CONTROLS DIAGRAM.

For more information on this incident, email: lossprevention@tindallriley.com

THIS CASE STUDY IS DRAWN FROM THE INVESTIGATION REPORT PUBLISHED BY THE MARITIME ACCIDENT INVESTIGATION BOARD (MAIB): https://assets.publishing.service.gov.uk/media/554a255d40f0b61589000061/MAIBInvReport_9-2015.pdf

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