

Safety Alert

Number: 16-25

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Subject: Injury to Crew Member

What Happened / Narrative

A recently qualified Third Engineer was assigned to a member's vessel, his first trip as a qualified officer. After 5 days on board the 3/E took over watches in the engine room as the sole engine room watch keeper. On the day prior to the incident tests were conducted on the cooling water for the main engines in line with the planned maintenance system. The tests showed a need to top up the chemicals in the cooling water of 3 of the 4 main engines.

On the morning of the incident the Injured Party, an engine cadet, was working under the supervision of the Second Engineer. He was tasked with topping up the chemicals in the cooling system of the main engines. 2 of the 3 engine requiring top up were completed, after which the IP was sent to continue a painting task he had previously been given.

At 12.00 the vessel was called in to work the installation they were attending, at the same time the 3/E took over watch keeping duties. The appropriate list of checks was completed and the vessel was alongside ready to work at 12.42, with all 4 engines on line.

The IP returned from lunch and at 13.15 informs the 3/E that he had completed the painting task assigned to him earlier in the day, and enquires of any other tasks needing completed. The 3/E, keen to clear the outstanding planned maintenance, asked the IP to complete the topping up of the cooling system on the remaining engine.

The IP accepted the task and proceeded to the engine room. The engines on board had a lower temperature and a higher temperature header tank. Both required topping up.

At approximately 13.19 the IP removed the cap from the HT header tank on main engine no. 3, as the engine was running the removal of the cap released 90°C water at 7 psi, spraying it across both forearms of the IP.

The contact with high temperature water resulted in 2nd degree burns to both arms of the IP. First aid treatment was given on-board.

Following medical advice from shore side medical support, the vessel diverted to port to send the IP to hospital for further treatment. Following further treatment at hospital the IP was released early the next morning to return home to attend his local doctor.

Why Did It Happen / Cause

- The limited time given to the 3/E for thorough familiarisation prior to commencing sole watch keeping duties was insufficient to provide the knowledge and experience of the vessel for him to be deemed genuinely competent in the operation of that vessel.
- Given his lack of understanding and knowledge of the machinery on board the 3/E was not aware that the cap must not be removed from the HT header tank whilst the engine was in operation or until cooled down following operation.
- The IP, being a cadet and having carried out the task previously, accepted the task without questioning whether it should be carried out whilst the engine was running or when the vessel was within the 500m zone.

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Corrective Actions Taken / Recommendations

- All new joining crew, whether recently qualified or new to the vessel, should be given a thorough familiarisation of all aspects of their duties on board.
- Assumptions should not be made that, because a newly qualified officer has passed his or her Certificate of Competency, they are instantly competent to undertake unsupervised watch keeping. An assessment should be made of the individual's competence prior to transfer of such responsibility.
- No maintenance to take place on machinery, either running or in standby mode, whilst in the 500m zone.
- Cadets have the same authority and responsibilities to stop the job as all other crew members. The purpose of cadetships is to learn and develop, if you are unsure, ask.
- Consider use of a warning sign (where not already present) to not release the filler cap when the engine is running and / or the coolant is hot.

Photographs / Supporting Information



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