

**SUMMARIES ENTERED ONTO FOCUS DATABASE SINCE PREVIOUS
SSHSCC OF ACCIDENTS AND DANGEROUS OCCURRENCES
INVESTIGATED IN SHIP AND BOAT YARDS**

SUMMARY

This paper introduces the summaries of accidents and dangerous occurrences investigated in ship and boat yards entered onto HSE's Focus database since the 45th SSHSCC.

BACKGROUND

1. At the 40th SSHSCC it was agreed that accident investigation summaries would be distributed with the agendas for the forthcoming meetings.

ACTION

2. Members are asked to note the content of the summaries detailed and to satisfy themselves where relevant, that they have adequate arrangements in place to prevent similar accidents from happening in their yards.

SUMMARIES ENTERED ONTO FOCUS DATABASE SINCE 45th SSHSCC MEETING OF ACCIDENTS & DANGEROUS OCCURRENCES IN SHIPBUILDING, SHIP-REPAIRING & BOAT YARDS INVESTIGATED BY HSE (SEPTEMBER 2002 – DECEMBER 2002)

Falls from a height

1. IP placed one end of a 2 m long plank on top of the vessel's wheelhouse and the other end on the quay wall. He then picked up the new float and attempted to walk along the plank onto the vessel. He had just passed the halfway point when the plank broke and the IP fell approximately 3.4 metres onto the starboard side of the vessel's main deck. Injuries sustained include fractured limbs.

2. IP fell through an open hatchway during the fitting out of a vessel. Since the accident the hatch covers have been redesigned. However, due to their excessive weight their use is still not 100%.

3. IP was carrying out repairs to a dry dock wall when the area of the dock on which he was standing gave way. When the repair work is restarted the correct access equipment will be provided to avoid the need to stand on the dry dock structure.

Ultra-high pressure water jetting

4. The jet of water from an ultra high pressure (UHP) water-jetting gun failed shortly after activation. When the IP reactivated the gun's trigger, the jet started at an angle and flashed across the bridge of his left boot. The yellow wellingtons the IP was wearing failed to prevent the water jet puncturing his boots resulting in superficial injuries. The UHP equipment was on hire and was found to have a defective nozzle.

Lifting operation

5. A vertical plate (4m x 2m x 8mm) had to be lifted and placed horizontally. The lift was carried out using a 1.5 tonne vertical, plate clamp on a pendant-operated, overhead travelling crane. The plate was in position and was ready to be lowered when it slipped out of the clamp and fell on the IP. This was the first time that the clamp had been used to lift a plate made from stainless steel as opposed to mild steel. The clamp's operating instructions state that stainless steel should not be lifted without contacting the manufacturer first, which was not done. However, the most likely cause of the clamp releasing the plate is the plate touching the floor and tilting slightly sideways against the pivoting jaw. The locking spring having insufficient force to maintain the clamping pressure on the jaws. Alternatively, the plate may have had a tendency to bow causing the gripping force to be reduced. Recommended that the plate undergo further tests and examination. No risk assessments available for lifting operations. The clamp's operating instructions had not

been made available to the employees. The clamp had not been examined and tested as required by the Lifting Operations and Lifting Equipment Regulations 1998.

Miscellaneous

6. A forklift truck (FLT) driver was asked to assist in disconnecting a mooring winch connected to a bollard by wire ropes and shackles. The shackles had been pulled tight by the movement of the barge they were mooring. To remove the winch the loading on the shackles had to be slackened. The FLT driver slid the truck's forks under the wire ropes. The plan was to raise the forks in order to slide the winch inwards thus reducing the tension. As the FLT took the load the winch slid towards a 415-volt feeder cable running around the outer dockside edge. The bottom corner of the winch support frame trapped the cable against the lip through which it ran. The cable ruptured resulting in a short circuit and a loss of power. A risk assessment had not been conducted of the task. Since the accident the safety committee has tasked various people to: review all cable locations; review cable identification markings; review the risk assessment procedure; seek to minimise cable exposure by alternative routings e.g. through a trench or along grooved section of quayside wall; and to consider the practicality of using barrier structures.

Fire

7. A fire on the Diamond Princess cruise ship under construction at the Nagasaki shipyard in Japan resulted in serious damage. The fire raged through 9 decks of the entire fore section. The vessel had been floated out in May from the dry dock and was undergoing outfitting. The shipyard had achieved a very high level of pre-installation with most of the piping and cables already attached to the blocks as they were fitted in place. The furniture, bathroom fittings, carpeting and all the wall surfaces were pre-loaded in a crate inside each cabin when each of the blocks was erected. The presence of the crates and the associated wrappings onboard the ship is likely to have resulted in a high fire loading, which may have contributed to the serious nature of the fire.