

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

**SUMMARY**

1. This paper introduces the summaries of accidents and dangerous occurrences investigated in ship and boat yards since the 46th SSHSCC. Details are also given of recent prosecution cases involving ship/boat yards.

**BACKGROUND**

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

**ACTION**

3. Members are asked to:

- note the content of the accident investigation summaries detailed as appendix 1 and to satisfy themselves where relevant, that they have adequate arrangements in place to prevent similar accidents from happening in their yards; and
- note the details of the two prosecution cases involving boat/ship yards that have been heard since the 46<sup>th</sup> meeting (see appendix 2).

**Appendix 1 – Accidents investigated in ship/boat yards 12/02 – 04/03**

Confined spaces

1. 2 shipyard employees died when they entered into a confined space on a submersible tank originally designed to recover submarines from the seabed. The atmosphere within the confined space was deficient of oxygen.

2. A contractor's employee was killed following a fire within a confined space. The incident involved a flammable liquid.

Miscellaneous

3. IP was polishing a shaft using hand held emery paper when he became entangled in a small chuck. The yard immediately prohibited the use of loose emery paper and instructed employees on the need to use emery boards.

4. Dangerous occurrence occurred when 2 trained riggers attempted to lift an L shaped plate weighing 9.5 tonnes with a lifting beam. The lifting beam, which was rated at 7 tonnes deflected under the load. The centre of gravity of

the load was difficult to determine resulting in the incorrect configuration of lifting accessories. Assistance should have been sought from a lifting engineer.

5. IP fell approximately 0.6 m from a trailer breaking both wrists after stepping onto a freely rotating wheel.

6. IP had carried out insulation resistance tests on the salvage generator of the ship. The IP had to remove control fuses to carry out the tests and in the process a fuse fell into the panel below. Using a multimeter he checked that the busbars were dead but did not check the transformer terminals, which were on top of the transformer. He retrieved the fuse he had dropped but then saw another fuse, which had been dropped by someone else. Whilst leaning in to retrieve this his right wrist came in to contact with 2 terminals on the transformer and he received a 440volt 60Hz shock and collapsed into the panel. A colleague heard an arcing noise, realised what was happening and that because of the confined space he could not safely pull the IP clear, so he ran to the main switchboard, one deck down and tripped the main incoming circuit breaker. Electricians have been reminded of the need to follow tag out procedures and to risk assess each task. Insulated tools have been purchased and the test form amended. A simple potential indicator for quick confirmatory tests has also been recommended, as has a perspex cover over the live terminals on the transformer.

7. The cause of the fire onboard the Diamond Princess in a Japanese shipyard has been identified as welding work near the ceiling of a cabin which caused a steel plate between the floor of the cabin above, to overheat.

#### Non-ship/boat yard

8. Welder died shortly after entering a confined space following the use of an inert gas in a welding process.

9. Employee was killed when a metal sheet came loose from a plate clamp.

#### **Appendix 2 – Prosecution cases brought since the 46<sup>th</sup> meeting involving ship/boat yards**

1. Total fines of £1500 for breaches of S 2(1) Health and Safety at Work etc Act 1974 and Reg 3 The Management of Health and Safety at Work Regulations following an accident where an employee patch painting a vessel fell from an unsecured ladder and fractured his heel bone. Costs of £2377 also awarded.

2. Fine of £2000 for breaches of Regs 4, 7 & 12 of the Electricity at Work Regulations 1989 following an accident to an electrician who suffered burns following operation of a switchfuse. No maintenance had been carried out on the fixed electrical installation. Danger increased by a lack of local isolation and an electrical test lamp with exposed conductors.