

Process Safety Forum

Learning Brief #10 – Issued on 30 September 2014

Anniversary of HMS Glasgow Fire

Date: 23rd September 1976

Location: Swan Hunter Neptune Yard Walker

Investigation Findings: During the construction of the HMS Glasgow an oxygen valve on an oxygen cylinder in a badly ventilated part of deck 3 and 4 which had limited access by timber ladders had been left open. The result was that the room and area had become oxygen rich and it was observed by those who had smoked cigarettes that their cigarettes burned through to the filter tip before they could draw on it. An employee of Telemeter Installations, working alongside Swan Hunter employees was preparing to do some arc welding. He struck the electric arc between the welding rod and work piece and immediately, due to the atmosphere, a very intense fire broke out which included the rapid combustion of painted surfaces and rubber covered cables strewn across the deck were giving off black smoke and most of deck 2 was quickly engulfed. At the height of the fire aluminium melted indicating a temperature in excess of 660 degrees C and eight men were killed. Swan Hunter's safety officer knew of the fire risk connected with oxygen and prepared a blue book for Swan Hunter employees and provided the information to their employees. However they failed to distribute this information to Telemeter and other contractors. Swan Hunter was prosecuted and fined £3,000.

Key Learning:

- Relevant Safety information given to contractors and their employees
- In some circumstances in confined spaces oxygen enrichment can occur
- Control of hot work needs to consider environment of the task
- Access and Egress should be considered for confined spaces.

The Process Safety Forum has been set up to provide an industry association platform whereby initiatives, best practice, lessons from incidents and process safety strategy can be distilled and shared across sectors, to influence our stakeholders (including the Regulators), and to drive the process safety management agenda. The Process Safety Forum consists of representatives from UKPIA, TSA, CIA, OGUK, CBA, RSSB, ENA, ECIA, UKLPG, BAMA, EIG, UKOPA, SWA and SDF. For further details contact: PSF.Secretary@gmail.com.