LP BULLETIN

Friday 30 May 2008

Bulletin 582 - 5/08 - Cargo Fire from Oxy-Acetylene Cutting - Worldwide

Lessons are to be learned from a Marine Safety Investigation Report, recently published by the Australian Transport Safety Bureau (ATSB), of a fire on board a general cargo ship anchored off the Australian coast.

The incident

The fire was caused when a fitter was removing steel brackets, welded to the hatch covers, with oxy-acetylene cutting equipment. This incident is similar to other fires seen in recent years where the crew have not appropriately assessed the risks associated with using oxy-acetylene cutting equipment on hatch covers.

In this incident, in the process of removing the brackets, a hole was inadvertently cut in the aft cargo hold hatch cover. As a result, sparks and molten metal fell into the cargo hold and onto the pallets of cargo stowed below.

When smoke was sighted and the alarm raised, the ship's fixed fire extinguishing system was used to flood the cargo hold with carbon dioxide, and the ship was brought alongside a wharf where the local fire fighting authorities took control. Despite several methods to extinguish the fire, it was four days before the fire was confirmed extinguished and not before the hold was flooded with approximately 700 tonnes of water via the fire monitor on an offshore supply vessel.

Safety management procedures

The ship's safety management system procedures did not provide sufficient guidance to ensure that the crew appropriately assessed the risks associated with removing the stoppers from the hatch covers. As a result, adequate precautions, in the form of a continuous fire watch inside the cargo hold, were not implemented before they started removing the stoppers. Members should consider the safety implications of this safety issue and to take action where it is considered appropriate.

Cargo stowage

The ship's cargo stowage plan was neither accurate nor complete. Consequently, the ship was in breach of the SOLAS requirements for the carriage of dangerous goods. However, more importantly, the ship's master, its crew and the fire fighters were not armed with documentation that clearly outlined the location, and types, of dangerous goods that would be encountered during the emergency response on board the ship. This incident is a real example of the importance of correct declaration of dangerous goods, and providing officers on board with cargo safety data sheets.

Working language on board
The fitter removing the stoppers from the cargo hold hatch covers could not read English and hence could not fully understand the requirements of the ship's safety management system hot work permit. Any safety notices, policies, guidelines and instructions should be available on board in the working language of the crew.

Source of information: Australian Transport Safety Bureau (ATSB)
www.atsb.gov.au

Use the following link to download the full investigation report of the incident described in this bulletin.
http://www.atsb.gov.au/publications/investigation_reports/2007/MAIR/mair245.aspx