



Marine Notice 5/2014  
Supersedes 11/2013

## Pressure Vessel Systems Response to Fatal Accident

This Marine Notice is issued in response to the Australian Transport Safety Bureau (ATSB) report no. 299-MO-2013-005 into a fatal accident that occurred on board a foreign flag vessel in Australian waters. Copies of the report can be downloaded from <http://atsb.gov.au/publications/safety-investigation-reports.aspx?Mode=Marine>.

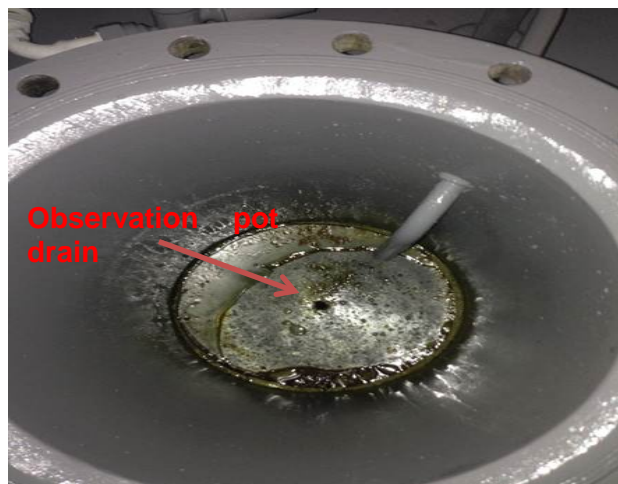
The accident was previously the subject of Marine Notice 11/2013, which is now withdrawn.

The fatality occurred when the observation glass of a main compressed air receiver drainage pot (refer photos) failed catastrophically while a ship's engineer was draining accumulated water (condensate) from the ship's main air reservoir.



The drainage pot observation glass failed when the drainage pot was subjected to significant air pressure (about 30 bar) from the pressurised air receiver. Pressure accumulated in the drainage pot when liquid from the air receiver restricted the flow of air and liquid out of the pot into the drainage piping and bilge.

The ATSB investigation found that the ship's main air receiver drainage pots were not fit for purpose, as they were not capable of withstanding the internal pressures that were likely to accumulate in service.



The investigation further found that the design of the drainage pots was modified at the time of the ship's building at the request of the owner's representative and that the shipyard did not conduct appropriate engineering analysis or testing of the modification prior to fitting it. Further, the revised design was not submitted to class for approval.

Information provided to the ATSB indicates that drainage systems of a similar design have been, and continue to be, fitted on board ships by various shipyards around the world.

All ship builders, owners, managers, classification society, surveyors and seafarers should consider the safety implications of the installation and use of closed condensate drainage/inspection systems and take action to identify and validate the design of any such systems on board ships.

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