



Significant Incident Report No. 222

Subject: Worker seriously injured by falling jib attachment on integrated tool carrier (IT)

Date: 12 June 2015

Summary of incident

An integrated tool carrier (IT) with a jib attachment was being used to lift a boat from a trailer into the water. The operation required the telescopic jib section to be extended manually by the offsider, but a build-up of fine material in the jib segments caused the jib to jam. In an attempt to dislodge the fine material, the operator of the IT raised the attachment with the jib angled downwards while the offsider struck the jib with a hammer.

The offsider was beneath the jib when the jib attachment detached from the IT and fell. His injuries included fractured vertebrae, broken ribs and a punctured lung.



Left: IT with jib angled down. Right: Jib attachment with locking pins not engaged.

Direct causes

- The offsider was positioned beneath the raised jib.
- It appears that the IT was being operated while the jib attachment locking pins were not fully engaged.

Contributory causes

- The hazards associated with unjamming the jib attachment had not been identified through either a risk assessment of the task or consulting the manufacturer's instructions.

- The design and configuration of the IT and jib attachment did not allow for visual confirmation of engagement of the locking pins. There was also no mechanical or electronic indicator fitted to confirm that the hydraulic pins were fully engaged.
- The IT with a jib attached was not fit-for-purpose.
- The operator had not been trained and assessed as competent to operate the IT with the jib attached.

Actions required

Supervisors and workers are reminded of the importance of conducting detailed risk assessments for work conducted with ITs and attachments. Recommended actions include:

- conducting risk assessments before performing any task
- using fit-for-purpose equipment for a task
- ensuring jib attachments (including quick hitch components) for IT carriers are periodically inspected and maintained by competent persons
- ensuring significant damage to jib attachments is assessed by a competent person and, when necessary, the jib is repaired, inspected and tested by competent persons or replaced
- ensuring workers are competent to safely operate the equipment and attachments
- ensuring the correct operation of attachments on ITs, including the positive engagement of locking pins, before the equipment is used
- ensuring areas that could be in the line-of-fire from suspended loads are clearly identified and workers do not enter such areas.

Further information

- Australian Standards, www.standards.org.au

AS 1418.5 Cranes, hoists and winches – Mobile cranes

AS 1418.8 Cranes, hoists and winches – Special purpose appliances

- Resources Safety, Department of Mines and Petroleum, www.dmp.wa.gov.au/ResourcesSafety

Mines Safety Significant Incident Report No. 194 Crush injuries sustained from working with a suspended load – fatal accident

Mines Safety Bulletin No. 114 Compliance requirements for multi-purpose mobile plant

This Significant Incident Report was approved for release by the State Mining Engineer on 12 June 2015