

SAFETY ALERT

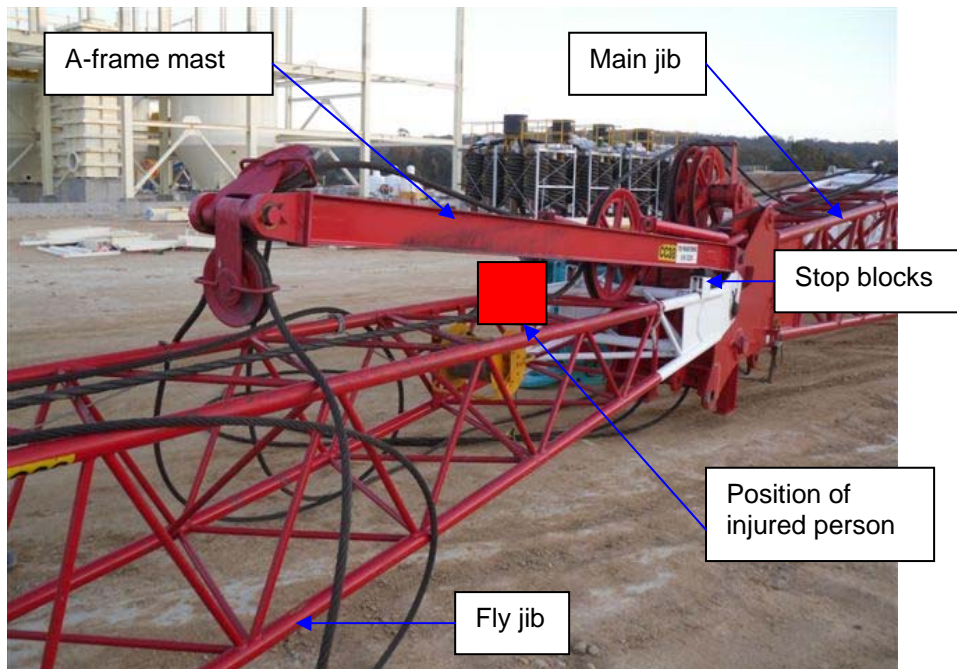
Crane A-frame mast falls on rigger

INCIDENT

A rigger was injured when a crane A-frame mast fell onto him as he lent across the fly jib to couple the electrical connections for the overwind sensor on the hoist rope.

CIRCUMSTANCES

Crane operators were making changes to the crane fly jib configuration in preparation for the next series of lifts. The crew had shortened the fly jib and were preparing to shorten the pendent wires from jib to fly. This required the pendent wires to be disconnected, which left the A-frame mast in an unsecured vertical position. As the rigger lent over the fly jib to couple up the overwind electrical sensor, the A-frame mast fell forward, landing on his upper torso and causing injuries, including rib fractures.



A photograph showing the location of the A-frame mast after the fall.

If the rigger was in a position closer to the head of the main jib the incident outcome may have been more severe, including a fatality.

INVESTIGATION

Incident analysis identified the following root causes:

- failure to follow the original equipment manufacturer's documented procedures
- failure to isolate gravitation energy
- the workgroup made an incorrect assumption that the tube on the A-frame mast was a double-acting retainer, which they believed secured the A-frame mast in position. This allowed them to disconnect the pendent ropes
- people being placed in pinch point areas.

RECOMMENDATIONS

All mines should:

- when hiring or dry hiring plant, ensure documentation that details safe operation of the plant is provided by the plant owner or hirer
- when supplying operators to operate hired plant, ensure the operators are competent to operate the plant safely
- ensure all lift studies are documented and communicated to those involved in the lifting process
- ensure lift studies which require configuration changes to the crane jib, fly jib or other parts make reference to safe work procedures for the task
- review documented procedures for the safe operation of plant prior to the commencement of unfamiliar tasks
- identify site-specific hazards which must be assessed and controlled.

NOTE: Please ensure all relevant people in your organisation receive a copy of this Safety Alert, and are informed of its content and recommendations.

Signed



Rob Regan
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MINE SAFETY OPERATIONS BRANCH
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