

TOWER CRANE INCIDENT REPORTING – July 2008

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1 Summary of Incident	2 Category	3 Causes	4 Action taken
<p>Pack of steel mesh was being lifted into the basement through the structure. The jib of the crane was cross winded but the wind was not of a high enough speed to have been of concern. A gust of wind deflected the jib which caused the mesh to swing making contact with a pack of rib decking stored on the basement steel. This caused the pack to fall into the basement level. The area below had an exclusion zone established and was being marshalled from a safe distance by a competent banksman.</p>	<p>Collision and fall of material</p>	<p>Weather conditions</p>	<p>Guide lines may have prevented the rotation of the mesh but if it had not, the operatives on them would have been within the danger area when the pack of decking fell.</p>
<p>During the dismantling of a saddle crane, 2 slinger/signallers nearly fell 4 feet onto the ground whilst unhooking the 2 chain slings on the jib section. Both were standing on the fall arrest line of the jib section to undo the chains. The line suddenly failed resulting in both men holding onto the top beam of the jib section. Neither were injured in this incident. The line appeared to be high tensile wire of approximately 6-8mm in diameter fixed at one end by wire rope tension brackets and at the other by a karabiner with tensioner.</p>	<p>Fall of person</p>	<p>Mechanical failure</p>	<p>Plant Hire company are to carry out a full and detailed inspection of all cranes where similar access arrangements are in place on the crane jib sections and confirm to Bovis Lend Lease that all wire ropes are fit for purpose. BLL inspected the damaged karabiner and concluded that it was badly corroded before the incident. Plant company inspection regime for the crane had not identified this unsafe condition.</p>
<p>Around 3 tonne of re-bar was being lifted from ground level to the back of a flat-bed lorry. The load was slung with 2 x 2tn webbing straps and the load was being slewed over the cab. As the load was 3/4 of the way over the flatbed, one of the straps failed and one end of the load fell on top of the lorry cab causing damage. This resulted in the entire weight being on the remaining strap which then gave way causing the other end of the load to land onto the flatbed section of the lorry. Parts of the re-bar moved over the edge causing damage to the edge protection system.</p>	<p>Fall of material</p>	<p>Failure of lifting accessory</p>	<p>A full investigation was undertaken. The area was made safe. The load was re-slung using chains and lowered to the ground.</p>

<p>While tower crane was slewing to pickup a concrete skip, it made contact with another tower crane hoist rope. At the time the AGS anti collision system fitted was not operational due to a technical fault, so both cranes were operating under permit conditions with the use of anti clash radios. The operators of the cranes were spoken to about the potential and the operator of one crane admitted that he had negated to relay his position to the other driver before entering its zone of influence.</p>	<p>Collision</p>	<p>Failure to communicate</p>	<p>The cranes were taken out of service and TC11 had its hoist rope inspected by a 3rd party with no defects found. TC 15 jib section was also inspected with no defects found. The process of the crane operators and slingers communicating effectively by use of the crash radios as the primary method was again briefed. A meeting was held with all appointed persons and lifting supervisors to re iterate the controls required when operating under permit conditions.</p>
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KEY:

SHADED AREA CONFIDENTIAL INFORMATION – CONSENT NEEDED FOR RELEASE

1. **Summary of incident** – brief overview of what happened
2. **Incident category** – outcome - one of the following 4 categories
 - a. **FATALITIES** – The death of a person, whether or not they are at work resulting from an accident arising out of or in connection with work – thus could include members of the public.
 - b. **MAJORS** – as defined in RIDDOR 1995
 - c. **OVER 3 DAYS** – as defined in RIDDOR 1995
 - d. **NEAR HITS**
 - a. **Dangerous Occurrences** – as defined in RIDDOR 1995, in particular the collapse of, the overturning of, or failure of any load bearing part of any tower crane – NEAR HIT
 - b. **Other failures** – not categorised as a dangerous occurrence under RIDDOR but resulted in a significant failure (physical or process)
3. **Causes** – whether mechanical failure, operator error, management failure etc
4. **Action taken** – bullet points
5. **Location** – of site
6. **Technical details** – such as crane type, period in situ, erection/dismantling and other relevant factors
7. **Levels of Training** – of those involved in the incident (appointed person, operator etc)
8. **Contact details** – such as individual, organisation, manufacturer or web material