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PERSONNEL BASKET ASSEMBLY SECUREMENT PIN FAILURE

DESCRIPTION:

The failure of a pin securing personnel (man) basket assembly on a knuckle boom crane. A worker was in the man basket and suffered bruising when the assembly pin sheared, and man basket fell to the ground.

The worker wore a separate personal fall arrest system (vertical lifeline) and was secured onto an anchor point on the boom.



CIRCLE HIGHLIGHTS SHEARED PIN LOCATED. SHEARED PIN ON TOP OF KNUCKLEBOOM.

CAUSE:

The metal securement pin failed which caused the basket assembly to fall.

CONTRIBUTING FACTORS:

Design of this personnel basket produces side loading conditions when in use, which may have contributed to excess strain on pin.

CORRECTIVE ACTIONS:

- » The Employer created specific policy for anchoring this specific personnel basket
- » Employer confirmed that the personnel basket is designed to meet CAN/CSA Z150-98(R2004) ¹
- » Additionally, for the reader from the Alberta OHS Act and Code: *any commercially manufactured suspended personnel basket that is erected, used, and operated must be maintained in accordance with the manufacturer's specifications or specifications certified by a professional engineer or,*
- » *A suspended personnel basket that is not commercially manufactured is designed and certified by a professional engineer*
- » *The personnel basket must be designed and built to some "generally accepted engineering principles". And it is expected that a "manufacturer" is able to provide drawings or sketches of the product that include an assessment of the product's strength, load-bearing capacity, etc.* Another element is the availability of written manufacturer specifications.

¹ Part 6: Cranes, Hoists and Lifting Devices