

Dropped Object – Wood from Crane Boom Rest Pedestal

Description of Incident (Occurred November 23, 2022)

During morning rounds on an offshore production facility, an operator discovered pieces of wood debris on the deck. It was noted at that time that the wood debris was not expected in this area. As a precaution, the operator erected red flagging to establish a potential dropped object zone and to prevent personnel from entering the area. The observation was reported for follow-up and investigation.

Through preliminary investigation, it was determined that the wood was released from a section of the crane boom rest cradle which resulted in the debris dropping approximately 50–55 feet to the deck below. The largest piece of wood located on the deck weighed approximately 1.3 lbs. The DROPS Calculator indicated that the potential of this dropped object was Major which could result in a Lost Time Incident (LTI).

See attached images.

What Went Wrong

The investigation determined that the condition of the wood on the crane rest was previously identified as requiring replacement, however, was not prioritized based on the risk of a potential dropped object. Given the size of the material and the drop zone, coupled with the lack of secondary and safety retention, the crane boom rest should have been given a higher risk ranking.

As a result of a previous event, preventative maintenance routines were updated to include the inspection of the crane rest. However, changes to how the maintenance routines were carried out resulted in one of the crane rests not being as closely inspected as intended.

The material used as lining (wood) for the crane boom rest is susceptible to the environment (i.e., moisture ingress) and therefore more prone to rotting. In addition, the crane boom can move slightly in the boom rest resulting in rubbing and friction that can cause damage to the wood lining.

Corrective Actions & Recommendations

- Replace current wood lining material with new or with an alternative material that is more resistant to the stresses and environmental influences. Fit new with primary fixing, secondary retention, and safety securing.
- Update Maintenance Based Risk Assessment processes to include use of Dropped Object Prevention Standard, DROPS Online Calculator and other industry learnings from similar Drops incidents. This will aid in proper risk ranking of Work Orders when associated with equipment at heights.
- Equipment at heights which have a drops potential should be identified and considered for inspection frequency, types of materials and possible methods of secondary retention and safety securing.

Applicable Lifesaving Rule

IOGP's [Line of Fire](#) lifesaving rule is applicable to this incident as it includes reporting of potential dropped objects.

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[Read more](#) Atlantic Canada Offshore Safety Alerts.

Related Images

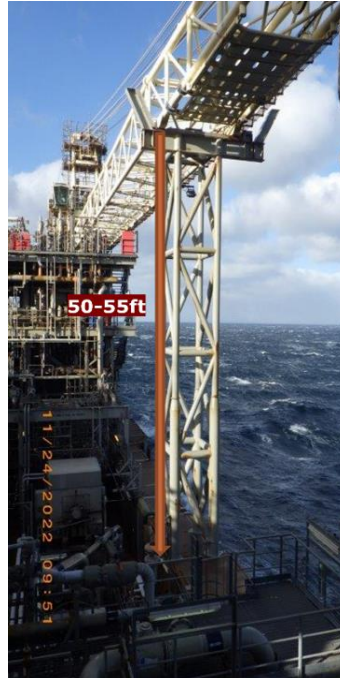


Image description: Distance of drop from crane



Image description: Debris

Outcome Calculator		
Height	55	ft
Mass	1.3	lb
Outcome	Major	96.94 Joules

Image description: DROPS Calculator