

Safety Alert

From the International Association of Drilling Contractors

ALERT 10 - 15

LIFEBOAT PROPERTY DAMAGE INCIDENT

WHAT HAPPENED:

An offshore rig recently experienced a property damage incident when a lifeboat davit component failed while performing a scheduled weight test of a lifeboat. Water bags were used to apply necessary weight to achieve maximum lifeboat capacity for the function test of release gear and davit components. As required by procedure, all personnel involved with the job remained onboard the rig and in a position of safety, limiting the actual severity of this incident to property damage. The lifeboat and davit arrangement consisted of two release hooks on the lifeboat supported by two davit fall/wires. When test weight was achieved, the brake was released at the davit to initiate a controlled descent of the lifeboat. The brake was set to stop the descent of the lifeboat approximately 6 feet above the water to check distance. The brake was again released to continue lowering the lifeboat and after descending another 6 inches, the threads of a sheave tensioning bolt used to adjust the sheave and secure it to the davit structure stripped. The bolt thread failure allowed the sheave to detach/separate from the davit structure creating 20 foot of slack in the bow fall wire. The slack wire allowed the bow of the lifeboat to drop into the water and the weight/force was transferred to the supporting fall/wire at the stern. This incident caused severe damage to the stern lifeboat deck area.

WHAT CAUSED IT:

Equipment Failure: Lifeboat arrangements with two davit falls/wires and two hooks all have an adjusting sheave located at the top of the davit to allow adjustment so the lifeboat will fit securely against the davit bumper. Photos attached to this bulletin page 2 of 2. The first photo shows an open type adjusting sheave and the second photo shows an adjusting sheave enclosed in a capture or preventer box.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

Immediate Action:

- Lifeboat davit arrangements that consist of two fall/wires used to support lifeboats equipped with two
 hooks/release gear mechanisms (bow & stern) shall not be lowered or hoisted during training
 exercises/drills with people in the lifeboats and this precautionary measure is effective
 immediately
- If maintenance or servicing of the lifeboat is required, maintenance wires must be attached and removed when work is completed.
- Weight tests of lifeboats and davits should be postponed until this issue is resolved.
- This action does not apply to single fall/single release hook capsule type lifeboat arrangements.
- This is a temporary precaution until we are able to implement corrective action for lifeboat davits of this type.
- This action only applies to training/exercises/drills and shall not prohibit them from being used if emergency abandonment of the rig and abandonment by lifeboat is required.

Engineering Actions:

- Open type adjusting sheaves will be fitted with capture/preventer housing.
- Tensioning bolts and nuts shall be compatible and made of carbon steel, not stainless steel.
- Preventative Maintenance will be implemented to require inspection for corrosion or other damage.
- A standard sheave tensioning bolt/nut arrangement.

Note: Review IADC ALERT 09 – 23 LIFEBOAT INCIDENT RESULTS IN A FATALITY at: http://www.iadc.org/alerts.htm Also review the IADC letter regarding lifeboat safety that can be found at: http://www.iadc.org/committees/offshore/index.html

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.



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View of open type adjusting sheave without housing that will not catch/hold sheave in the event of failure.



View of adjusting sheave with housing designed to catch/hold sheave in the event failure. Engineering will assist Operations with upgrading open sheaves to this enclosed type.

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