

Experience Transfer

Subject:	Near Miss - Dropped Object – Sheave loading gate	Date:	19/10/2022
Region:	UKAF	Revision:	1
Product Line:	Wireline	Case ref:	19126
		E.T. number:	1283

Description:

During Wireline operations in the UK North Sea, the crew were carrying out a pickup when they heard a noise, lost weight, and noticed that a section of the upper Wireline sheave had come loose and fallen to the rig floor.

On closer inspection, it was identified that the section which had fallen was the cable loading gate and section of the sheave internal frame.



In discussions with the crews and post incident investigations it became clear that the load bearing pin had not been used to secure the gate in place as it was not present at the time of rigging up the equipment. The crew had discussed this and decided that the gate was not load bearing and was only required to be closed and engaged so a tie wrap was used instead of the correct pin. As the weight on the sheave increased, the tie wrap eventually failed allowing the gate to open and cause a bending moment on the other side of the sheave. This has then allowed the cable to come free from the sheave and drop onto the opened gate causing the failure and subsequent dropped object. The cable also dropped and was damaged as it fell against the top of the grease injection head.

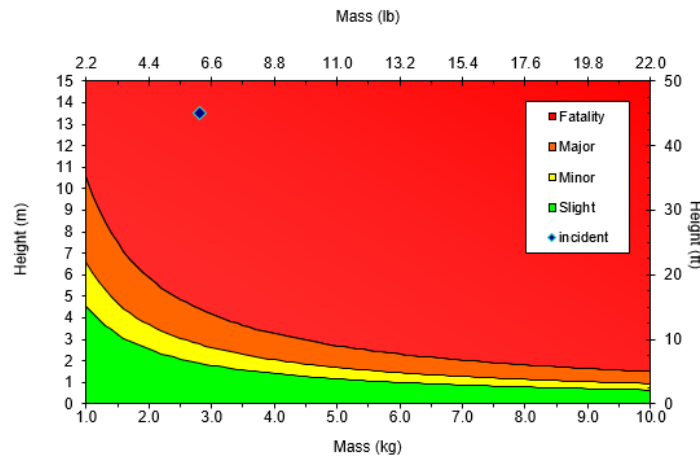
Initial investigations were completed before operations commenced to recover the damaged equipment.

Created by:	Wood, Dave	Date:	19/10/2022
Approved by:	Robb, Phil	Date:	19/10/2022

Potential Consequence:

Due to zone management of the working area, there were no personnel within the drop zone. When we look at the potential using the DROP's calculator, we can see that the outcome may have been severe had this not been adhered to. Always ensure that dropped object checks and zones are always discussed and adhered to.

Outcome Calculator		
Height	45	ft
Mass	2.8	kg
Outcome	Fatality	376.62 Joules



Investigation Findings:

- Lack of knowledge of equipment design and load bearing nature
 - Competent to use the sheave in an operational sense but lacking full understanding of sheave workings
- Lack of design and loading information within current training program but detailed within equipment manuals and operational procedures
- Load bearing pin missing from sheave at time of rig up and not used to secure loading gate
 - Lanyard which secures pin to sheave was loose and able to come free easily
- Operational checklists and SV documents incorrectly used and lacked specific detail to ensure valid checks to avoid this type of incident were completed
 - Operational checklists and sheets completed at the incorrect time to ensure maximum value
- Control of work documents and processes incorrectly used to ensure and verify operations were conducted correctly
 - Permit and Lift Plan in place but not used to complete operation by any of work party
 - Stop Work Authority and Management of Change not adequately completed to ensure assessment and agreement on equipment changes being implemented

Created by:	Wood, Dave	Date:	19/10/2022
Approved by:	Robb, Phil	Date:	19/10/2022

Actions:

- Create alert and share with personnel, company, and Industry groups
- Enhance training materials, operational documents, and checklists to ensure knowledge of equipment and additional checks and verification steps
- Enhance maintenance program to include additional focus on lanyards and securing wires
- Communicate with personnel to ensure correct understanding for the use of Control of Work processes and procedures to assess and control operations
- Liaise with Operator to ensure that all learnings and actions from the incident are implemented and verified as correct through future operations

Created by:	Wood, Dave	Date:	19/10/2022
Approved by:	Robb, Phil	Date:	19/10/2022