



EXPRO

Potential Dropped Object
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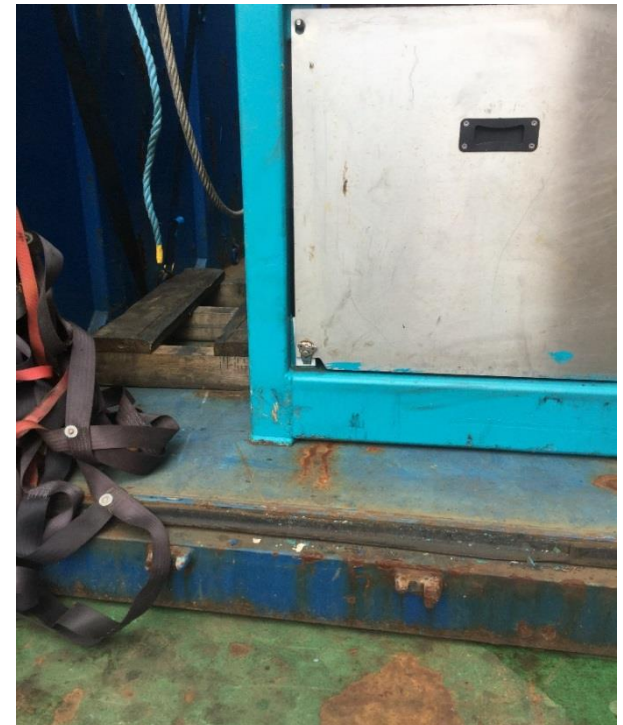
UK Area



Potential Dropped Object (PDO)

During backloading on a semi-submersible in the North Sea a removable panel (8kgs) on a High Pressure Unit (HPU) dislodged after a moderate hit when it was being lifted. The PDO was noticed when the lift was approximately 15 meters above the deck.

Once the unit was lowered back to deck it was noted that there were 2 removable panels which had come loose.



HPU Panel Fastening Mechanisms



Upper Securing Locating Pin



Lower Securing Clasp

The Panels



Removable Panel 1 - Stainless steel panel hanging by the upper left locating pin



Removable Panel 2 – The upper left locating is missing

Immediate Actions



- Immediate actions
 - Time out for safety
 - All removable panels on this unit were taken off and manually moved to the container
 - The unit was checked again prior to lift and deemed safe and secure





Investigation and Root Cause

Investigation

- Expro crew had completed a drops checklist prior to lift
- The area had adequate barriers in place, no personnel were in the firing line
- There was a similar incident reported and investigated with this type of HPU in India in 2016, this resulted in an actual dropped object
- Remedial actions from this previous incident have proved inadequate/ineffective

Root Causes

- Design – inadequate design of removable panel securing mechanisms
- System – the document change request raised for updating an internal procedure after the last event was rejected and the other remedial actions proved ineffective and/or hadn't been completed



- Subsea Product Line to prepare a plan to modify all HPUs globally, due to quick release clasps not being required
- Update maintenance procedure in the interim to detail that Loctite 234 should be used to secure the upper locating pins
- Update the design specification for new units
- Safety alert issued internally and to the client and communication to the DROPs forum and Step Change in Safety
- Review the approval/rejection process of high criticality document change requests