

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learned from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links. Additional links should be submitted to webmaster@imca-int.com

1 Failure of Valve Visual Position Indicator on Subsea Christmas Tree

During well decommissioning, problems were experienced when attempting to open two annulus swab valves on subsea trees. Several attempts were made to open the valves using diver intervention. Onshore inspection later confirmed that the visual position indicator on both valves had failed rather than the valve themselves, leading to an incorrect representation of the valve status.

The key lessons learned were:

- ◆ Indicators of valve position may be prone to failure in service
- ◆ Failure of a visual indicator to represent actual valve position could have safety implication for subsea well intervention operations particularly where there is the involvement of divers

The client has made a number of recommendations including:

- ◆ Consideration of valve position indicator failure should be included in the risk assessment for well intervention operations
- ◆ Checks on position indicators should be done during routine subsea inspection.

2 Exploding Diffuser

During testing and operation of a bell blow down valve, a sintered bronze silencer/diffuser blew apart. Due to extensive fragmentation of the diffuser it has been impossible to determine the reason for this incident, but it is thought to have been caused by a build up of debris within the unit, and possible impact damage during normal use.

The contractor has recommended the following routine should be included in the Planned Maintenance System for the silencer/diffuser.

- ◆ Strip down assembly.
- ◆ Remove deposits using a soft wire brush.
- ◆ Treat components in an active ultrasonic bath with a suitable solvent to remove rust, corrosion, scale and tarnish until visibly clean.
- ◆ Dry component using diving quality air.
- ◆ Reassemble, install and test the assembly.

3 DP Incident

Following a recent DP incident, which occurred when alongside a fixed installation, a contractor has issued the following safety notice. There was no damage or injury to either personnel or assets.

- ◆ DP Operators must be aware of the blind areas which other ships or structures can present when operating on DGPS reference systems, particularly when using land based differential systems.
- ◆ The effect of lit flares on DGPS signals (and other radio signals) needs to be assessed when considering operations close to flare booms.

- ◆ All available reference systems should be made available and ready for immediate operation when operating close to other vessels or structures, particularly when DGPS reference systems are being used as the prime references.
- ◆ Taut wires should be lowered to a position above the seabed clear of the highest obstructions and not less than 10m above the bottom.

4 Use of a Diffuser

A diver has been found to be suffering from tinnitus and ear pain. It is thought that this has been caused by using the bell emergency blow down with no diffuser in place.

The contractor has issued the following instruction to its personnel:

- ◆ A diffuser should be installed on all pressurisation lines regardless of whether they are to be used for emergency blow down or not;
- ◆ The routine inspection of a diffuser should include a check that all exhaust valves are fitted with a fingerguard.

5 Failure of a X-90 ROV LARS System

Whilst deploying an ROV using a Tekmar X-90 LARS launching system, the main umbilical sheave and docking assembly dropped approximately 0.5m leaving it supported only by the hydraulic roll control rams. Immediate investigation showed that the two cheek support plates, which support the umbilical sheave and docking assembly, had failed.

The manufacturer has been notified of the failure. Cause of the failure is unknown at present but provisional visual inspection indicates plate fatigue or weld failure. A full investigation is now underway, which will include metallurgical examination.

6 Crane Incident

A serious incident occurred on a fixed installation while dismantling a Unit – Mariner 3600 portable crane. Three people were seriously injured and a fourth was lost overboard and did not survive.

The boom and gantry had been removed from the crane. Workers were preparing the power module section of the crane for removal after the platform crane had secured this section. The power module sits on a turntable atop a pedestal 28 feet above the deck. This portion houses the motor, hydraulics, and controls for the crane. The power module fell when four of its hold-down pins were removed before it was secured by connecting slings to the line on the platform crane. The team investigating the incident has determined that other crane models may have sections that will remain in place by the force of gravity when the pins are removed, giving a false sense of security.

The company concerned has proposed the following actions:

- ◆ During dismantling all sections of the equipment should be secured prior to removing pins.
- ◆ The work should be properly planned and personnel familiar with the equipment should be used.