

IMCA Safety Flash 02/98

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

I Man killed by falling ROV equipment on a Drill Rig

A member has alerted IMCA to a fatal accident on a Drilling Rig.

The accident involved an individual who was assisting to move a ROV hydraulic power pack, weighing 6,000 lb. The webbing sling holding the load failed and the load fell on his neck and killed him.

The IMCA member company, which was not directly involved in the specific accident, has issued the following instruction to their staff to prevent a similar accident occurring in their operations.

All site supervisors (on and offshore), offshore managers, diver superintendents, ship's officers should make sure that webbing strops are in-date and inspected before they are used – EVERY TIME.

Amend Company relevant Maintenance and Inspection Guidance on MAN-MADE FIBRE SLINGS as follows:

measure the length to check for stretch

Visually examine web sling along its entire length and check for:

- cuts or tears
- burst stitching (especially around the eyes)
- chemical damage
- heat damage
- ingress of foreign bodies into fibres
- distortion/wear in metal eyes (where fitted)

Ensure the Safe Working Load is clearly marked and the identification tag is still attached.

IF ANY FAULTS ARE FOUND IT MUST BE TAKEN OUT OF SERVICE

2 Serious Personal Injury and Uncontrolled Lowering of Final Splice Bight

An incident occurred during a cable laying operation, while in the process of slipping the final splice in 4,900 metres of water. As the cable end came off the top of the drum, the pre-form stopper began to slip along the cable until it pulled off the end. At the same time, the Bosun had moved into the cable line, from a position of safety, to clear away some tools on the deck. The end of the cable, together with fittings and the pre-form stopper hit the deck head above the cable diverter and struck the Bosun, wrapping around him and dragging him off, knocking him to the deck and over the side, seriously injuring him.

The investigation discovered that only one pre-form stopper had been present. The contractor has elected to issue instructions that two pre-form stoppers should always be applied to non-armoured cable, with equalising wire between the stoppers and a ball bearing swivel between the equalising wire and the rope.

3 Contamination of Divers Air Supply

An incident occurred on a DSV where a diver's air supply became contaminated with fumes from an overheated electrical compound. This caused the diver to fall unconscious in the water. Although he was recovered to the surface and resuscitated, the incident could have been fatal.

The investigation revealed that the diver's primary air supply was taken directly from a high pressure (HP) bank which was being continually charged during the diving operations. The HP compressor used to charge the supply was fitted with an electric dehumidifier which had been left switched on for over 48 hours. The electrical components in the dehumidifier subsequently overheated and discharged noxious gas, which contaminated the supply.

The contractor has carried out the following actions:

- diving air supply on-line to the diver is no longer supplied from a HP bank being charged
- all HP supplies are analysed before being put on-line
- the electrical power supply to the HP compressor dehumidifier has been fitted with a time switch to prevent it being
 accidentally left on for extended periods and overheating

4 Slewing, Storage and Securing of Gas Quads on Ships

A contractor member has reported several near misses/incidents due to the positioning of quads, resulting in damage to regulator boxes and pillar valves. In order to address these incidents, the contractor has issued the following guidelines for storing quads on deck:

- where possible no quads are to be stored with manifolds facing areas where loads are lifted inboard/outboard
- consideration should be given to positioning the quads in the following way: Two quads facing each other with sufficient gap between to allow access to valves and to allow for protection to regulator boxes
- under no circumstances should quads be lifted in rough weather conditions
- regulators and whips should be disconnected from the quad prior to any movements
- any lashing down of quads should be carried out by competent personnel but in all instances should be checked by the marine crew

5 Electrical Power Supply to ROV Equipment

When wiring up the trailing lead of a piece of ROV equipment to a junction box on the ships' electrical supply, an electrician incorrectly identified the trailing lead wires and connected the ROV equipment earth to a live phase on the 440 volt 3 phase supply. A key factor in this error was that the yellow covering on the phase wire of the trailing lead had a dark bank along it due to pigment discolouration from the outer cable sheath which led the electrician to presume it to be yellow/green earth.

On powering up, the Superintendent received an electric shock. This incident again highlights that ROV equipment and site conditions in which it is used invariably involves potentially fatal electrical supplies. The integrity of electrical wiring to such equipment can fail.

The contractor involved has proposed the following:

- ensure that continuity and earth checks are carried out after wiring or modifying any electrical equipment regardless of confidence in integrity of wiring
- those in charge of ROV equipment at site should be reminded that they are responsible for powering up such equipment and in every case it is essential that they seek and get formal assurance that continuity and earth tests had been carried out both on receipt and site of such equipment or after any modification to electrical supplies