IMCA Safety Flash 07/06

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 Near-Miss – Potential Use of Petroleum-Based Grease in an Oxygen-Rich Environment

A member has reported a near-miss incident involving the use of hydrocarbon-based grease in an oxygen-rich environment. A diving supervisor had asked an electrician to remove a seized CO_2 scrubber motor from a deck decompression chamber (DDC) for repair. The electrician removed the motor to the workshop, where it was dismantled, cleaned and the bearing lubricated with petroleum-based grease.

The use of petroleum-based grease on a motor to be used in an oxygen-rich environment (as on a CO_2 scrubber in a diving bell) could cause self-ignition and fire, with resulting injuries or fatalities.

It was realised that petroleum grease had been used before the motor was refitted. The motor was discarded and a new motor used instead.

The following points were noted:

- The diving supervisor had not advised the electrician that petroleum-based grease should not be used;
- The electrician was unaware that petroleum-based grease was not to be used;
- The fact that grease was applied to the bearing was detected and immediately the scrubber motor was discarded.

The company involved has made the following recommendations:

- Procedures for repair or maintenance of any item should specify special requirements (if any) for that item;
- Diving/life support equipment should only be serviced by appropriately experienced and qualified personnel;
- Diving/life support equipment should always be checked by appropriately qualified personnel following repair, to ensure all appropriate service and maintenance safety precautions are taken.

2 Kirby Morgan One-Way Valves Follow-Up to IMCA Safety Flash 09/05 item 1

Further to Kirby Morgan Safety Notice #1 of 2005, Kirby Morgan Dive Systems Inc. has issued the attached *Product Bulletin* #2 of 2006, reporting out that, following recall of one-way valves p/n 555-195 (see IMCA safety flash 09/05 item 1 and Kirby Morgan safety notice #1 of 2005), these valves have all been re-tested and re-certified; and have been proven the be fully functional and fit for their intended purpose.

These valves now have two date stamps, as shown in the picture. The stamp on the cylindrical valve body is the original manufactured date. The date on the hexagonal valve seat is the date of the re-test.

3 Crane Incident

A member has reported a crane incident on one of its vessels. A crane hook snagged a piece of piping, which was lifted as the hook was raised. The piping subsequently fell, missing two people who were on the deck below. No-one was injured.

Investigation of the event revealed the following:

- The crane had been stowed with the hook resting within the open top of a waste skip;
- The waste skip had not been covered by a net or tarpaulin;



• The crane boom and hook had been raised before the banksman had checked that all was okay and given the crane driver clearance to lift.

The following lessons learnt were noted by the company:

- Crane operations must be properly controlled and managed according to company procedures;
- Crane hook stowage positions should be properly assessed by the worksite management team;
- Crane hook stowage positions should be properly implemented by all crane drivers. It was noted that, on occasion, crane hooks had also been tied off to a handrail and that this practice should cease;
- Waste items in a skip should be more appropriately positioned and, if necessary, the skip covered with a net or tarpaulin.

4 Recall Due to Failure of Parts in Dacon Rescue Scoops

IMCA has been alerted to problems encountered with certain parts of the Rescue Scoop manufactured by Dacon a/s. This is a crane-operated rescue net for recovery of casualties from the water directly on board rescue vessels.

There have been two recent failures of Dacon scoop lifting rings. The rings in question parted at the weld causing the scoop to fall, in both cases into the sea. No-one was injured in either incident.

As a result of two incidents reported, Dacon a/s has chosen to replace all stainless steel lifting rings on its Rescue Scoops manufactured after the year 2000 when these rings were introduced. The rings to be replaced are of 90×13 mm and 120×13 mm.

Dacon asks all users of this equipment to contact them for certified replacement rings by e-mail (rescue@dacon.no) or by fax: +47 67 53 34 40.

This message has been previously published by the Marine Safety Forum, as MSF safety flash 06/16:

http://www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-06.16.pdf