

IMCA Safety Flash 13/08

August 2008

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 Faulty Governors

A member has reported a series of incidents involving the shutdown of two different diesel generators onboard a long term chartered vessel. On three separate occasions these incidents caused a full blackout, a partial blackout and the loss of a generator. The DP class II multi-purpose support vessel has four governors of the Woodward PG-EG58 type. During the incident investigation and fault finding process, two suspect governors were removed and replaced with two new units from a separate batch. The two suspect governors were returned to the manufacturer for inspection. The results of this inspection are summarised below:

- ♦ Broken check valves were found in the governor oil pumps of both units;
- ♦ The oil spray nozzle filters were blocked in both units. Small metal particles and pieces of check valve were identified;
- The filter in the oil line to the torque motor was blocked in both units. Small metal particles and pieces of check valve were identified;
- Foreign metal particles were found inside one of the governor units. These particles had caused the filters to become blocked, preventing oil flow to the hydraulic valve.

Although the governor can operate without the check valve, the pieces of broken valve were carried in the hydraulic system. This caused malfunction of the hydraulic valve.



Blocked oil spray nozzle



Broken check valve



Foreign metal

2 Seaeye ROV Tether Arcing Incident

IMCA member SAAB Seaeye has provided the attached safety news flash regarding an ROV tether arcing incident.



15th August 2008

Seaeye ROV Tether Arcing Incident

An arcing event was recently witnessed in a Seaeye Cougar XT ROV tether that did not trip the systems safety devices; the intermittent arc/fault was only rendered safe following human intervention turning off the power.

The incident occurred when the ROV became entangled and the tether damaged.

The arcing did not trip the system's Line Insulation Monitor (LIM). Investigations are still ongoing but theoretically this could be due to the rapid variation in DC supply introduced by the voltage compensation system which can prevent the LIM sensing. The bandwidth and rate of change that can be accommodated by the LIM is currently being investigated with the manufacturer.

The arcs witnessed were consistent with "spatter" type arcing which is intermittent in nature and can occur with very little current draw. The current draw during each arcing event was insufficient to exceed the system's 35A trip threshold and the current draw during each arc therefore registered as a legitimate load.

Whilst considered very unlikely it is possible that this fault could occur in any XT ROV system and operators should plan to manually shut down the power system should unexpected current fluctuations be observed to allow a full investigation.

As an additional measure operators can temporarily disable the voltage compensation facility on their XT system whilst a conclusion is sought – instruction to do this can be obtained by emailing support@seaeye.com

For further information please email: rovs@seaye.com