

IMCA Safety Flash 06/04

June 2004

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 Heave Compensation Software Anomaly

Keywords: *Lifting*

A member has reported the following information relating to an incident which occurred on one of its vessels fitted with a Huisman crane, which is considered important for all cranes fitted with heave compensation systems.

During deployment of a work basket to the seabed, the crane whip line unexpectedly paid out twenty metres of wire. This resulted in the work basket and some crane wire landing on the seabed in an uncontrolled manner. At the time of the incident, the crane was operating in heave compensation mode.

Investigations into the incident have highlighted the following situation:

- ◆ During active heave compensation operations, most of the winch speed capacity is used to maintain the hook at a constant level in relation to the seabed. If the crane operator chooses to raise or lower the hook whilst operating in this mode and in rough sea conditions, it is possible that the winch might not provide enough speed to maintain the new level position, resulting in an unexpected and unwanted movement.

In order to rectify this situation, the following software modifications were carried out to the active heave compensation system:

- ◆ The available hoisting or lowering speed of the winch by means of the joystick control, whilst in active heave compensation mode was reduced. This modification ensures that the active heave compensation system has more available winch speed than the operator;
- ◆ The second modification disables joystick control once a set deviation between the theoretical and actual positions of the crane hook is met. Therefore, in rough sea conditions the winch will not follow joystick commands until it has caught up with the heave compensation requirements.

The company wishes to bring this to the attention of all crane operators' onboard vessels to ensure that they are aware of such potential failure situations.