

IMCA Safety Flash 19/15

November 2015

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt 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

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide in good faith safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

All the incidents in this Safety Flash involve the Crew Transfer Vessels used by members in the offshore renewables industry.

I Near Miss During Transfer Operations from a Crew Transfer Vessel (CTV) to a Turbine Tower

A member has reported a near miss incident during transfer operations between an offshore renewables industry CTV and a turbine tower. The incident occurred during the pick up of crew from a tower – a crew transfer vessel was pushing on to the tower and started transferring crew. The weather was workable but there was a long high swell which was considered manageable. When the high swell came the transfer was stopped, and restarted when safe to do so. The swell caused the vessel to go up and down for five rungs on the ladder. As it did so, a person was briefly left suspended by his fall arrest equipment when the boat moved suddenly under the influence of the swell. There were no injuries.

After pushing on with maximum engine power and monitoring the swell, the first person was asked to come down. The person was transferred to the crew vessel with his fall arrester still attached to the tower. This person stepped back too fast and the inertia reel mechanism in his fall arrester temporarily locked. The deckhand tried to help this person with unhooking from the fall arrester. Unexpectedly the swell came in and the vessel moved down, causing the person to be lifted into the air and temporarily suspended by his fall arrester. As the deckhand was holding on tight to the fall arrest equipment, he too was lifted off his feet. When the vessel came up again the deckhand jumped back on deck, while the person remained on the ladder. The vessel moved up and down but no-one was hurt as the fender of the boat and boat landing were designed to leave space between ladder and persons.



Further personnel transferring from that tower to the CTV were asked to disconnect the fall arresters at the last five rungs of the ladder. All further transfers took place safely.

It is noted that there were around one hundred (100) personnel transfers conducted safely on that day and that this unexpected swell occurred only once.

The fall arrest equipment was checked and found to be in good condition. The root causes of the incident were found to be incorrect work procedures, and insufficient awareness.

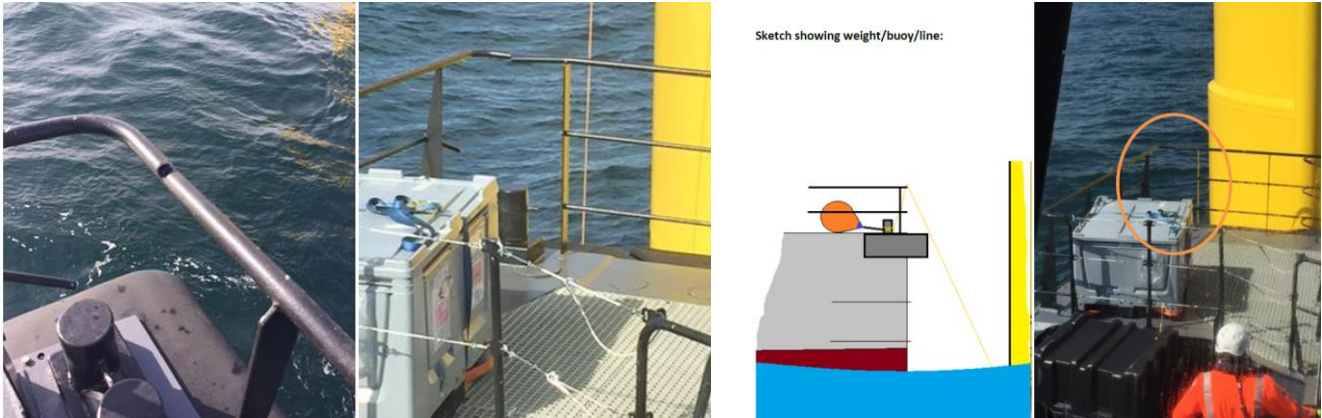
Members may wish to refer to the following incidents (search words: *fall, arrest, turbine, transfer*):

- ◆ [IMCA SF 02/10](#) – Incident 2 Near miss: improper use of fall-arrest equipment leads to fall;
- ◆ [IMCA SF 06/14](#) – Incident 3 Near miss incidents during personnel transfer to offshore renewable energy installations;
- ◆ [IMCA SF 02/15](#) – Incident 5 Near miss: man overboard [from CTV].

2 Rigging Incident: Damage to Bow Hand Rail on a Crew Transfer Vessel (CTV)

A member has reported an incident in which the bow rail of an offshore renewables crew transfer vessel was damaged. The incident occurred whilst retrieving a buoy and clump weight on the seabed next to a wind turbine generator monopile. The line attached to the weight snagged, damaging the vessels bow railing. Crew were on the foredeck retrieving a buoy from the monopile (attached to a clump weight of 15-20kg which was on the seabed).

Once the buoy had been lifted on-board, two riggers quickly began retrieving the loose line until it became taut against the weight on the seabed. As they began to pull the weight up from the seabed it became snagged. The riggers fixed the line to the forward cleat so that they could reposition themselves to pull harder. Unknown to the Master, as his vision was very restricted with a large grey storage box on the foredeck, the riggers had pulled the line over the top rail and made fast to the bollard below. The rope drew tight and personnel positioned themselves away from the bow to avoid the snap back zone. The rope did not snap but it cut through the top rail and broke the middle rail off completely.



Showing damaged bow rail on CTV.

Sketch showing weight, box and line, and photo.

Our member noted the following:

- ◆ A toolbox talk had been held on-board, including the Master and superintendent before the work took place, and at no point was it discussed that the line would be tied to the forward cleat;
- ◆ The incident was discussed on-board after its occurrence and it was highlighted that in the event of snagging, the line should never be tied to the vessel and nothing should ever be tied over the handrails;
- ◆ The handrail was repaired on the next maintenance day.

Members may wish to refer to the following incidents (search words: *rigging, CTV*):

- ◆ [IMCA SF 07/15](#) – Incident 4 *Minor damage to pontoon cleat during crew transfer vessel mooring operation.*

3 An Error with Fire Flaps Led to Engine Space Flooding, Causing Costly Damage

A member has reported an incident in which there was sea-water flooding of one of the engine spaces on a crew transfer vessel, leading to significant and expensive equipment damage. The immediate cause of the flood was a small error - **fire flaps not being secured properly**.

Some days before the incident, the engine space fire flaps had been operated. But the retaining pin to hold the fire flap open had not been returned to the correct position. This led to the fire flap bouncing shut on the next occasion when the vessel was out in moderate seas. With the fire flap now shut the engine air intake began to loosen fixings within the engine space due to its immense suction. One of the fixings loosened was the toilet overboard pipe. With no-one aware of it until the bilge alarm sounded, the engine room had been filling quickly with sea water as the suction, combined with gravity, drew it in.

On the way back to port and long before the cause of the flooding had been realised, the engine room continued to flood. The engine room bilge pump became blocked and the manual bilge pump (whale gusher) quickly perished after a lot of operation. The mobile suction bilge pump was used to contain the water level.

The vessel returned to port on one engine, with the other engine bay flooding up to its engine mounts and the engine in reduced power mode. The flooding caused the engine on that side to require substantial servicing and repair to remove damaged parts and water residue/ emulsified oil from its machinery and drive gear, resulting in significant off-hire time. There were no injuries or risk to life, but it was an extremely expensive lesson to learn.

Members may wish to refer to the following incidents (search words: *flooding, crew*):

- ◆ [IMCA SF 05/10](#) – *Water ingress to bow thruster space*;
- ◆ [IMCA SF 16/14](#) – *Near miss: engine room flooding*.

4 Vessel Made Contact with Installation

A member has reported an incident in which a vessel made contact with part of a well-head installation, causing damage to the installation. The incident occurred when the vessel was conducting cargo operations alongside a well-head installation; after a period where small cargo loads were being transferred, the crew of the installation advised the vessel that they had a larger cargo unit to land on deck, which required the crane block to be swapped.

With the break in cargo operations and forthcoming larger cargo load, the Master took the decision to send the on-watch second mate down to deck to assist the two ABs. The second mate complied, leaving the Master alone on the bridge. Shortly after this, the Master made the decision to take the vessel out of joystick mode and into manual control; he then set the vessel's controls in an attempt to maintain station whilst he visited the washroom on the bridge. During his time away from the controls, the vessel lost position and began drifting towards the installation. Seeing the vessel moving closer to the installation, the deck crew radioed the bridge with no response. The Master came out of the washroom and noticed the vessel's movement but was too late to regain control and prevent contact. The vessel's stern roller impacted on one of the installation's legs, causing damages to both vessel and installation.

Our member noted the following:

- ◆ There was serious complacency: the Master subsequently stated that in previous instances the controls were also left unattended as long as the propulsion was counteracting the effects of environment (sea current, wind, etc.) and the position was visually maintained;
- ◆ There was failure to properly assess the risks involved in:
 - leaving the vessel in manual manoeuvring mode;
 - considering the second officer's attendance on deck as being more important than on the bridge;
 - leaving the bridge controls unattended.
- ◆ The Master failed to comply with COLREGs Rule 5 (Look-out);
- ◆ Both the Master and the second mate did not follow existing company safety management system procedures stating that "*as a minimum, there shall be 2 persons on the Bridge, where at least one is a certified watch-keeping officer*";
- ◆ The second mate should have exercised the **STOP WORK POLICY** when instructed to leave the bridge.

The following actions were taken:

- ◆ The vessel had to go to port for repairs and was off-hire for some time;
- ◆ The Master was replaced at the request of the client;

Key lessons learnt:

- ◆ Personnel are still failing to correctly exercise the **STOP WORK POLICY**; all personnel are expected to exercise the **STOP WORK POLICY** at all times where unsafe acts or conditions occur;
- ◆ Over-confidence and complacency are serious failings; complacent attitudes and failure to correctly apply industry, company and client procedures are leading to incidents and injuries;
- ◆ Poor risk assessment leads to a lack of preparedness; control of work processes are in place to allow employees to control their work and environments. Failure to effectively apply these means our work begins to control us;
- ◆ Full awareness of, and compliance with, company safety management systems, is vital.

Members may wish to refer to the following incidents (search words: *collision*):

- ◆ [IMCA SF 13/14](#) – *Incident 5 unplanned vessel contact with an installation during lifting operations*;
- ◆ [IMCA DP Safety Flash 03/15](#) – *Marine safety forum – safety flash 15-18: collision with rig*;
- ◆ [IMCA SF 09/15](#) – *Incident 6 Aberdeen harbour: annual summary of marine safety reports for 2013*.