



Summary of Marine Safety Reports 2015

For the purposes of this report, the following codes are used:

The categories are as follows:

- 1 Collision (contact between vessels moored or underway).
- 2 Contact (contact between vessels and fixed objects and structures).
- 3 Grounding.
- 4 Near miss or misc.
- 5 Fire, explosion, flooding.
- 6 Pollution.
- 7 Person overboard.
- 8 Other on board incident.
- 9 Machinery failure, mechanically disabled or hull failure.
- 10 Capsized, sinking or listing.
- 11 Accidents resulting in injury, or worse, to Boards staff or port users whilst vessels are underway within the waters of the port

Table 1, Summary of Incident Types to December 2015

Incident Type	Count of Incidents
1 Collision	6
2 Contact	7
3 Grounding	1
4 Near miss or misc	6
7 Person Overboard	1
9 Machinery Failure	3
Total	24

Table 2, Summary of Incident Causes to December 2015

Incident Cause	Count of Incidents
Human factors onboard	19
Machinery/Equipment failure	4
Other	1
Total	12

This equates to 0.99 incidents per 1000 vessel movements.

Notes

2. Total movements is the sum of arrivals, departures, shifts and non-statistical movements between the last board meeting in the previous reported year and the last Board meeting of the reporting year. In 2015 this amounted to 24102 movements.

Table 3, Incident Details to December 2015

Code	Date	Incident Description	Cause (If known)
1	28-12-14	As the ERRV [REDACTED] was manoeuvring to depart from [REDACTED] Quay, the ship made light contact with the ERRV [REDACTED] berthed astern.	Human factors on-board. The master had misjudged the speed of operation of the bow thruster.
1	02-02-15	The ERRV [REDACTED] with a Pilot embarked was manoeuvring to depart from [REDACTED] Quay, the ship made light contact with the Northlink Ferry [REDACTED].	Human factors on-board. It was concluded that there was confusion with the bridge team.
2	18-02-15	The offshore support vessel [REDACTED] was moving from [REDACTED] Quay to [REDACTED] Quay. As the ship moved astern [REDACTED] it was observed setting down onto the [REDACTED] Berth and before a warning could be issued contact was made.	Human factors on-board. The master had been manoeuvring the ship using the 'Joystick' controls and he had moved the joystick in the wrong direction
7	21-02-15	The offshore supply vessel [REDACTED] berthed at [REDACTED] Quay reported a 'man overboard' during gangway rigging.	Human factors on-board. The investigation report had identified a lack of situational awareness of the seaman involved.
2	23-02-15	The offshore anchor handler [REDACTED] with a pilot embarked was transiting the 'Cut' the starboard shoulder of the vessel made contact with the quay.	Human factors on-board. Awareness of strong wind conditions was lost as the vessel entered the cut.
4	01-03-15	As the pilot climbed the ladder of the offshore supply vessel [REDACTED] it dropped one rung and it was noticed that the stanchions were not properly secure.	Human factors on-board. The pilot ladder was not rigged in accordance with IMO regulations.
4	13-03-15	The ERRV [REDACTED] was transiting the Navigation Channel inbound, the vessel was observed to turn to starboard on to a northerly heading.	Human factors on-board. The master had overcompensated a turn to starboard when the ship was too far to the south of the leading line.
1	02-04-15	The ERRV [REDACTED] was manoeuvring to berth at [REDACTED] Quay No.1 the ship made contact with the ERRV [REDACTED] berthed at [REDACTED] Quay No.2.	Human factors on-board. The master misjudged the approach.
3	06-04-15	The offshore supply vessel [REDACTED] was proceeding to sea in variable but poor visibility. Immediately on passing the MOC the vessel was observed to swing gently to port and come to a stop. The vessel then moved astern, realigned with the centre line of the channel and departed.	Human factors on-board. The Port Engine was left in Back up mode after the pre sailing checks which made it unresponsive to the bridge control.
2	04-05-15	The ERRV [REDACTED], with a pilot embarked, was departing from [REDACTED] Dock control of the main propulsion unit was lost and the ship made heavy contact with the [REDACTED] Ro-Ro ramp walkway.	Human factors on-board. When the thruster was shut down by the bridge team this caused low oil pressure in the system triggering an engine declutch.
2	18-05-15	The offshore supply vessel [REDACTED], with a pilot embarked, was manoeuvring 'dead ship' from the dry dock to Russell's Quay with the assistance of two tugs swung unexpectedly on to the quay.	Human factors on-board. The tug masters had been unable to attend a pre-towage meeting and that this may have contributed to the incident.

Code	Date	Incident Description	Cause (If known)
2	26-06-15	As the ERRV [REDACTED] was manoeuvring to go alongside at [REDACTED] Quay the ship twice made heavy contact with fenders on the berth.	Human factors on-board. The master had misjudged the approach to the berth and had overcompensated with the bow thruster.
9	22-07-15	As the offshore anchor handler [REDACTED] was moving off [REDACTED] Quay the ship reported to VTS that it had suffered a 'blackout'.	Machinery/equipment failure. A loose connection had been found in the propulsion control system.
1	14-08-15	The ERRV [REDACTED] was manoeuvring to berth at [REDACTED] Quay and made contact with the [REDACTED], berthed at [REDACTED] Quay.	Human factors on-board. The investigation revealed that the Master had misjudged the vessel approach.
1	21-08-15	The ERRV [REDACTED] on departure from [REDACTED] Quay sheered to starboard and the port quarter made light contact with the Cargo Vessel [REDACTED] also berthed at [REDACTED] Quay..	Human factors on-board. The master [REDACTED] had been distracted by the conversation with VTS and subsequently lost control of the ship and the master's unfamiliarity with the ship, lack of an adequate handover and a perceived haste to depart port had also been factors
4	25-09-15	The ERRV [REDACTED] let go all mooring lines from [REDACTED] Berth and as expected began to drift off the Quay. When the master attempted to manoeuvre the ship it became apparent that he did not have control of engines or steering.	Human factors on-board. The master of the vessel identified that a switch had inadvertently been moved and that this had caused the loss of control.
1	28-09-15	As the ERRV [REDACTED] shifting from [REDACTED] Quay to [REDACTED] Quay the vessel made light contact with the offshore supply vessel [REDACTED], berthed at [REDACTED] Quay.	Human factors on-board. Lack of proper planning for berthing in [REDACTED] Quay when there was limited space available.
2	02-10-15	The offshore support vessel [REDACTED] was moving out of the dry dock, 'dead ship' to [REDACTED] Quay with the assistance of a pilot and two tugs. During the manoeuvre the ship's fenders made contact with dry dock entrance and later light contact was made with [REDACTED] Quay	Other. The incident was investigated but this resulted in conflicting reports from the parties involved. It is accepted that this manoeuvre is very difficult and that all the personnel involved acted professionally in trying to minimise any adverse events.
4	09-10-15	During the hours of darkness as the Pilot Cutter was crossing the stern of the offshore supply vessel [REDACTED] to board a pilot when it was noticed that a mooring line was trailing some 30 metres astern of the aft mooring station. There was insufficient time for the Pilot Cutter to take evasive action but the engines were stopped as the line was crossed.	Human factors on-board. Mooring party on the vessels stern were to blame for allowing a rope to trail in the water.

Code	Date	Incident Description	Cause (If known)
9	26-10-15	The ERRV [REDACTED] in Aberdeen Bay launched their Fast Rescue Craft (FRC) to come into port to effect a crew change. About ten minutes later the FRC reported that it had broken down and was drifting westward. The master of ship requested permission from VTS to recover the FRC which was granted and the situation was also discussed with Aberdeen Coastguard.	Machinery/equipment failure. The drive shaft between the engine and the propulsion system had sheered at both ends, possibly caused by overheated bearings.
4	02-11-15	As the pilot was preparing to board the offshore supply vessel [REDACTED] he noticed that the bottom steps from the ladder were missing. The vessel had previously stated the ladder was rigged in accordance with IMO standards.	Human factors on-board. The original ladder had been cut into two short sections as it was too long.
4	02-11-15	The Tug [REDACTED] was assisting the general cargo vessel [REDACTED] to swing in the tidal harbour prior to berthing at Atlantic Wharf. As the tug increased power to tow the stern of the ship round, the towline parted. A new towline was quickly made fast and the ship was manoeuvred alongside Atlantic Wharf. During the mooring operation the ship let go the towing line together with the parted section of the old line and messengers which became fouled in the propulsion system of the tug.	Machinery/equipment failure. The absence of a suitable fairlead in the aft mooring arrangements of the ship caused the initial towline failure as the angle that the towline reaches is too acute. During the recovery of the towlines and messengers a combination of the wash from the ship's propeller and the actions of the tug contributed to the lines becoming fouled.
9	11-11-15	The ERRV [REDACTED], with a pilot embarked, was manoeuvring to go alongside at [REDACTED] Quay. As the first mooring line was sent the bow thruster became inoperable. This was quickly followed by alarms and loss of control of the main propulsion systems. Power was also lost to the capstans and winches at the mooring stations.	Machinery/equipment failure Faults in the Propulsion Control systems.
2	23-11-15	The [REDACTED] tanker [REDACTED] was approaching the fairway buoy in order to embark a pilot. The ship was instructed to standby 1 mile from the buoy to await the pilot. A few minutes later the VTS officer noticed that this instruction had not been acted upon and that the ship was in close proximity to the fairway buoy. The ship was instructed not to pass the buoy without a pilot on board. This instruction was acknowledged and shortly afterwards the radar echoes of the ship and the buoy merged.	Human factors on-board failure. The master had not fully understood the instructions that had been given to him by VTS.

Figure 1, Incident Types to December 2015

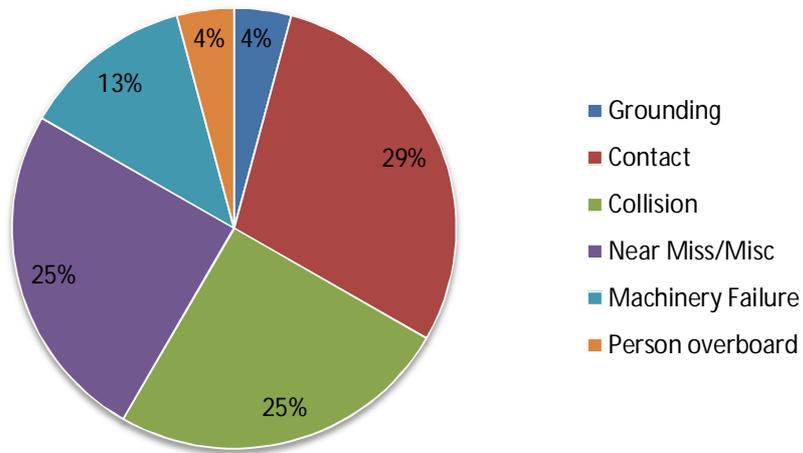


Figure 2, Incident Causes to December 2015

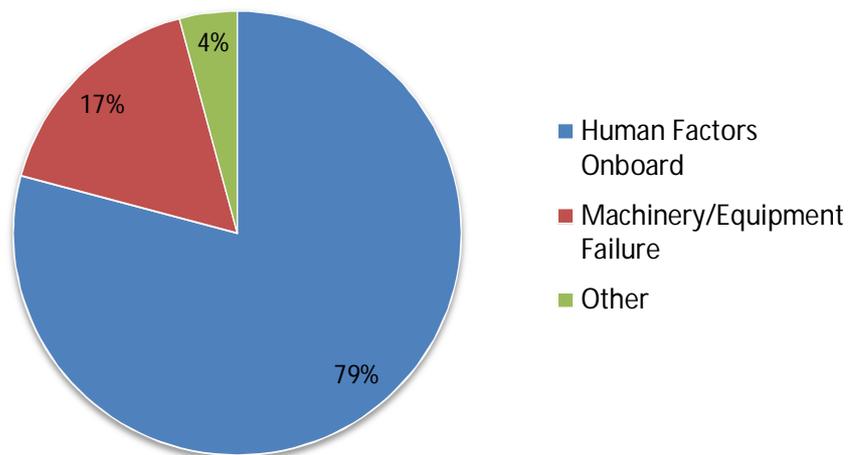


Figure 3, Incident Types since 2013

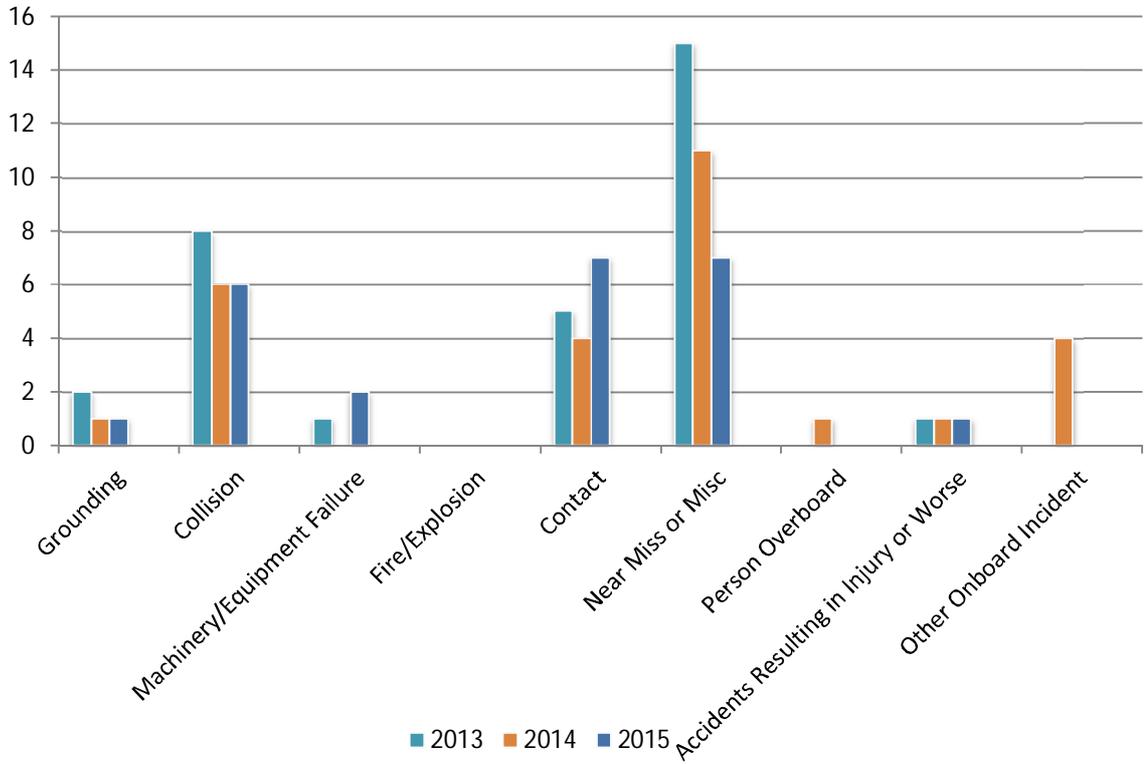
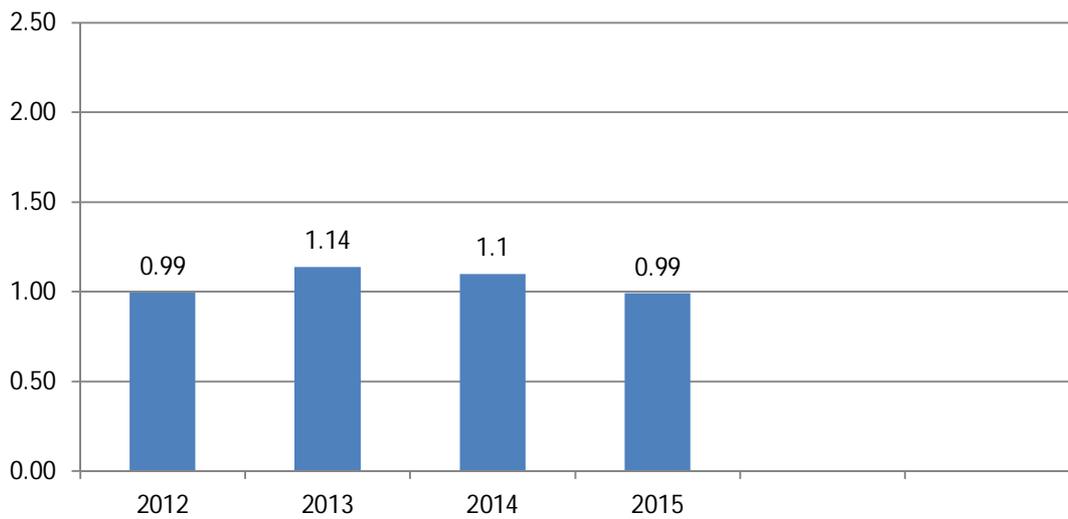


Figure 4, Incidents per 1000 Vessel Movements since 2012



Observations

Over half of the incidents and near misses reported involve ERRV's yet these ships account for less than 10% of vessel movements in Aberdeen Harbour.

After investigation almost 80% of incidents identified that 'human factors on board' was a causal element and many of these involved a lack of familiarity with the propulsion and control systems on the ship.

Other incidents relate to inadequate passage planning, and in particular a lack of planning 'Berth to Berth'.

Recommendations

Aberdeen Pilots and other marine professionals have recognised that ships which have efficient Bridge Resource Management (BRM) techniques are more able to respond appropriately to changing situations, and are more effective in preventing incidents or near misses from occurring.

It is noted that IMO and Maritime Coastguard Agency have accepted that BRM is a valuable skill and that from 2017 ships' deck officers revalidating their qualifications will be required to have a current BRM certificate.

It is recommended that all ships' deck officers attend BRM training courses as soon as possible, and that the effectiveness of the bridge team be closely monitored by the vessel owners/operators.

Propulsion and Control Systems

It is recommended that all ships officers be fully conversant with the propulsion and control system fitted in the vessel to which they have been appointed.
In some circumstances this may mean that an extended hand-over period is required, or other training resources utilised.

Captain Ray Shaw
Harbour Office
January 2016