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**REPORT OF THE INVESTIGATION
INTO
THE FATAL INCIDENT ABOARD
“FV LIBERTY”
ON
14th FEBRUARY 2013**

**REPORT NO. MCIB/230
(No.4 OF 2014)**



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1. SUMMARY

(Note: All times are in UCT)

The “*FV Liberty*” a 13.32 metre (m) Length Overall (L.O.A.) Irish registered fishing vessel departed Dunmore East at approximately 23.59 hrs on the 13th February 2013, with a Skipper and two crewmembers on-board, to go single net bottom trawling.

At 12.30 hrs on the 14th February 2013, the fishing gear was shot away at a position approximately 23 miles south of the Old Head of Kinsale. Hauling of the gear commenced at 17.50 hrs and during the hauling operations, the bag rope failed, causing a split link to strike a crewmember. The crewmember was fatally injured.

2. FACTUAL INFORMATION

Vessel Particulars

Name of Vessel:	“ <i>FV Liberty</i> ” (See Photograph No. 1)
Fishing No:	W216
Year of Build:	1986
Overall Length:	13.32 m
Breadth:	4.96 m
Depth:	2.97 m
Engine:	Baudouin, 6 cylinder four stroke, turbocharged, diesel engine of 221 KW Capacity.

General Description of Craft: Traditionally built steel vessel of carvel form, with a raked stem and transom stern. The vessel was of decked design, with a three-quarters length shelter deck (See Photograph No. 1).

A two-drum trawl winch was fitted on main deck under the aft end of the shelter deck. A two drum net drum was fitted on gantry towards the transom of vessel. On the port side of the main deck a tubular steel landing derrick was fitted.

Vessel powered by a Baudouin, 6 cylinder four stroke, turbocharged, diesel engine of 221 KW Capacity.

A wheelhouse fitted at the forward end of the vessel and the engine room fitted under the main deck forward.

Code of Practice: A Code of Practice¹, Declaration of Compliance for the “*FV Liberty*” was carried out on the 9th November 2011 and was valid until 24th May 2014. The Marine Survey Office carried out the Code of Practice inspection.

Safety Statement: A safety statement was on-board the vessel and the Skipper’s name was on the statement.

Type of marine casualty or incident: Very Serious Marine Casualty.

Location of incident: 23 miles south of the Old Head of Kinsale (See Appendix 7.1 approximate position of casualty).

Place on board: Port side on main deck.

¹Code of Practice for the Design, Construction and Equipment of small fishing vessels of less than 15 m length overall is referred to as the Code of Practice in this report.

Injuries/fatalities: 1 fatality.

Damage/
environmental
impact: Nil.

Persons on board: 3



Photograph No. 1: "FV Liberty"

2.1 Crew Particulars

The Skipper was 31 years of age and had been a fisherman all his working life. He owned small fishing vessels from 2006 until January 2013. No records were produced by the Skipper or could be found in the State's data banks of him completing the mandatory safety training courses or being in possession of Radio Operators Short Range Certificate Module 2. He had worked for a total of six days on the "FV Liberty" prior to the incident.

The first crewmember was 20 years of age. Prior to the incident the crewmember's entire seagoing experience was working on the "FV Liberty" for approximately three months during holidays. A review of records determined that this crewmember had not undertaken the mandatory safety training courses.

The second crewmember (henceforth referred to in this report as 'the casualty') was 24 years of age (DOB 11/12/88) and it is understood that he had worked sporadically as a fisherman during his working life. It is understood this was his first day on this vessel. A review of the records determined that the casualty had not undertaken the mandatory safety training courses.

2.2 Environmental Conditions

Winds: Moderate, Force 4.

Visibility: Good.

Seastate: Rough, mainly swell from a westerly direction and a moderate sea from a northwesterly direction.

(See Appendix 7.2 Met Éireann weather report).

2.3 Radio Equipment

During the incident communication difficulties were reported. To carry out radio communications it was necessary to transmit on a Cobra VHF and receive on a Sailor VHF.

Several deficiencies were found with the radio equipment, including; faulty GMDSS radio batteries, dirty connectors on Sailor RT 2048 VHF antenna, power connector and handset and the Cobra VHF had the incorrect MMSI Number programmed into the unit.

2.4 Protective Headgear

No protective headgear was provided aboard the vessel for the use of the crew.

2.5 Lifting Equipment

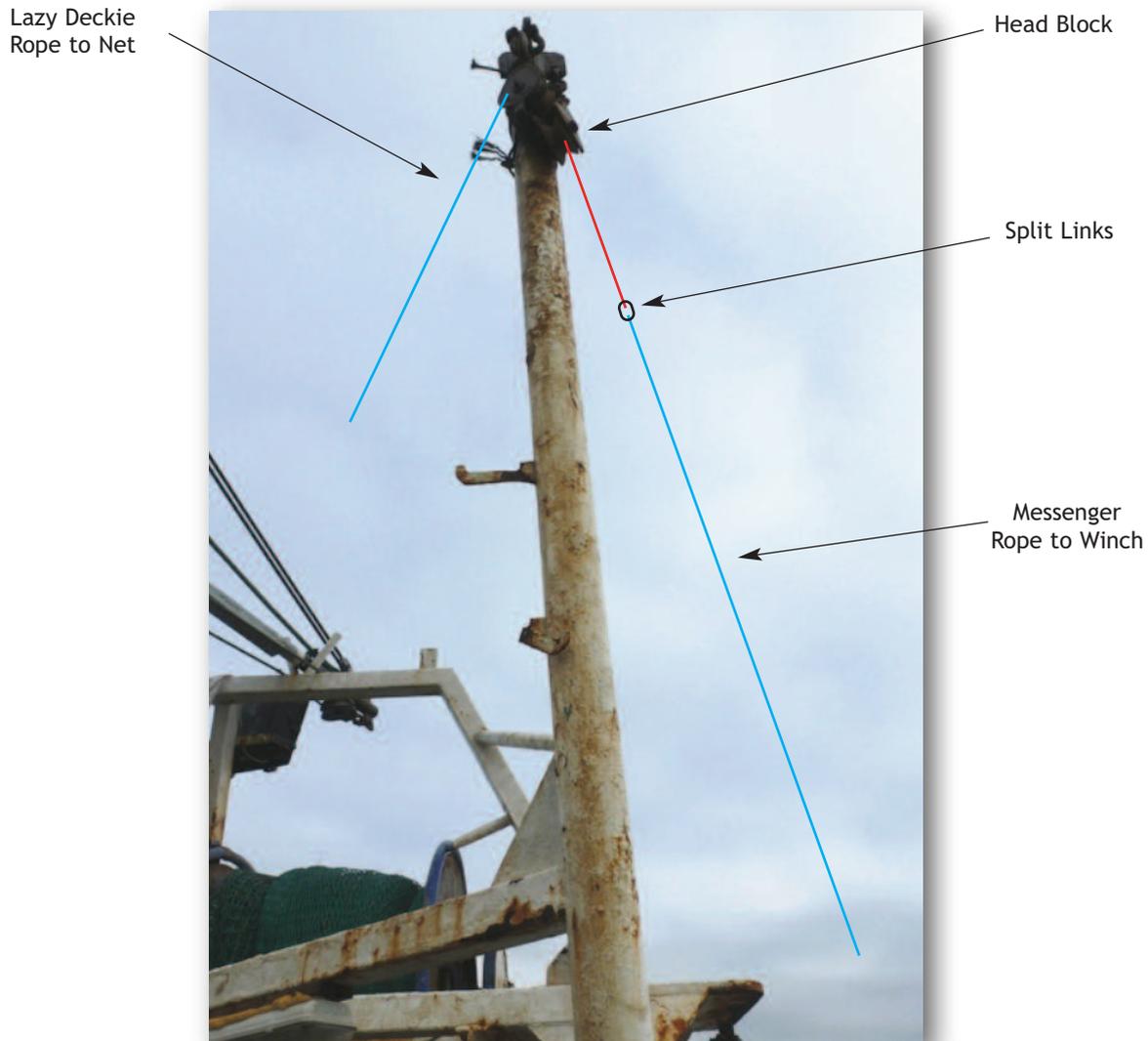
The lifting equipment on the vessel consisted primarily of the following elements; a trawl winch, cod end derrick, head block on derrick, lead sheaves from base of cod end derrick to winch, the messenger rope, lazy deckie (also known as a splitter rope or bag rope) and connection (split links) between lazy deckie and messenger rope. (See Photographs Nos. 2, 3 & 4).

The main components of the lifting equipment were found generally to be in a poor condition with excessive wear apparent. On the head of the lifting derrick two sets of blocks were secured; the block used for the lazy deckie messenger rope was found to be in a badly worn condition. (See Photographs Nos. 5, 6 & 7) and (Photographs Nos. 9, 10, 11 & 12 in Appendix 7.3).

The positioning of the pair of blocks would be prone to jamming ropes passing through one of the blocks.

The split links connection consisted of a Boss DL 21 Split Link attached to the messenger rope and an unmatched split link that would have been attached to the lazy deckie rope. The Boss DL 21 Split Link had a rated load safe working load of 1.4 tonnes. There were no identification marks on the unmatched split link. (See Photograph No. 3).

The two split links were of different sizes and on initial inspection they were found to be jammed together and thus would not be able to move freely through blocks and over sheaves (See Photograph No. 8).



Photograph No. 2: Arrangements of Ropes and Components on Cod End Derrick

The Boss DL 21 Split Link was found to weigh 575 grams and the unidentified link 188.3 grams.

The messenger rope was spliced into a Boss DL 21 Split Link. The lazy deckie rope was stated to have been spliced into the unidentified split link (See Photograph No. 3).

The lazy deckie and the unidentified split link were part of the equipment supplied by the Skipper.

The messenger rope consisting of a three-stranded hawser laid 24mm polysteel rope had a breaking load of 10,490 kgs.



Photograph No. 3: Close-up of Split Links



Photograph No. 4: Split Links

It was not possible to determine the type of lazy deckie rope as it was cut away in the incident. As there was no rope attached to the unidentified split link it is reasonable to conclude that the lazy deckie rope failed at the connection to the unidentified split link.

No certification for the vessel's lifting equipment was provided as required by the Safety, Health and Welfare at Work (General Applications) Regulations 2007.



Photograph No. 5: Arrangement of Blocks on Derrick Head



Photograph No. 6: Block at Derrick Head that Lazy Deckie, Split Links & Messenger Rope Passed Over



Photograph No. 7: Close-up of Head Block



Photograph No. 8: Jammed Split Links

2.6 Risk Assessment

A requirement for Fishing Vessels under the Safety of Health & Work Act 2005 is that a vessel's owner must complete, an assessment of the health and safety risks arising in the normal course of work activities or duties on the vessel. An example of a suitable standard or written risk assessment is available from the Health & Safety Authority.

A standard risk assessment form was provided by the Owner for the "FV Liberty", which included the names of the crew on-board the vessel at the time of the incident. The document was dated the 1st January 2013, which pre-dates the dates the crew on-board at the time of the incident joined the vessel.

Parts of the Risk Assessment, which was signed by the Owner, states:-

- All crew have completed the 3-day mandatory Basic Safety Training and hold a valid BIM Safety Training card, or meet the training requirements as set out in S.I. 587 of 2001.
- Hard hats are provided and worn when slinging or lifting loads.
- The VHF radio equipment on the vessel is in good working order.
- Deck equipment, such as, derricks, gallows, winches, pot haulers and power-blocks are in good condition.
- The hydraulic systems are maintained and serviced regularly.
- The lifting gear is not overloaded.

The Skipper was unaware of a Risk Assessment Document being on-board the vessel or the requirements of same.

2.7 Previous Failures Of Lifting Equipment

The investigation was made aware of the fact that a previous incident (within three months of the incident under review) had occurred with failure of lifting equipment on the vessel and that it had resulted in an injury to a crewmember. The incident was not reported to the authorities as required by the Merchant Shipping (Investigation of Marine Casualties) Act 2000.

3. NARRATIVE

When the vessel was berthed in Dunmore East prior to the voyage, one of the vessel's trawl nets that had been supplied by the Owner, was exchanged for a used net supplied by the Skipper. The Skipper's net had been kept in storage and had not been used since October 2012. The net was apparently changed because it was deemed to be more suitable for the intended fishing grounds that the vessel was going to fish in.

The casualty joined the "FV Liberty" at 22.45 hrs on the 13th February 2013. Prior to sailing, he looked around the vessel and assisted in loading stores.

The "FV Liberty" a 13.32 m L.O.A. Irish registered fishing vessel departed Dunmore East at approximately 23.59 hrs on the 13th February 2013 with a Skipper and two crewmembers on-board, to go single net bottom trawling.

The Skipper kept the first watch until 04.30 hrs on the 14th February 2013. The watch was then handed over to the casualty who kept the watch until 07.00 hrs, at which time the watch was handed over to the first crewmember who kept the watch until 09.30 hrs. The watch was then handed back to the Skipper.

The fishing gear was shot away at 12.30 hrs at a position approximately 23 miles south of the Old Head of Kinsale. The fishing gear was towed until approximately 17.50 hrs when hauling operations were commenced. During the towing operations the Skipper was keeping the watch.

The hauling procedure consisted of, hauling the trawl warps onto the winch, unclipping the trawl doors and hanging them off on the gallows. The net would then be brought to the surface using combination rope bridles that would be attached to the net and the trawl wires on the winch and by winding the bridles onto the trawl winch. The bridles would then be unclipped from the net and the body of the net would then be wound on to the net drum.

A messenger rope would then be clipped onto one of the port side bridles; the messenger rope passing through sheaves and through the head block on the landing derrick.

The aft end of the messenger rope would then be clipped on to the lazy deckie/bag rope/splitter rope attached to the trawl. The trawl cod end would then be hauled on-board on the port side of the vessel, using the trawl winch and cod end derrick.

During the critical phase of the hauling operation all three crewmembers were on the deck of the vessel. The Skipper was showing the casualty the procedure for hanging off the trawl doors, clipping on and off the bridles, and clipping on the messenger rope onto the lazy deckie. The first crewmember was operating the winch.

Once the lazy deckie was clipped on, the Skipper returned to the wheelhouse, brought the vessel into position to haul aboard the cod end, then returned to the deck and positioned himself on the port side of the vessel near the fish conveyor system. The casualty was standing towards the aft end of the vessel so as to be out of the way of the suspended load.

Whilst the cod end was being lifted out of the water the messenger lifting rope suddenly went slack, with split links falling to the deck. The Skipper noted the casualty slump to the deck with blood pouring profusely from the left side of his head.

Realising that the crewmember was seriously injured, the Skipper decided not to move him, but make him as comfortable as possible and request helicopter assistance.

The Skipper contacted the Coast Guard at Marine Rescue Sub Centre, Valentia by VHF Radio and requested helicopter assistance.

To manoeuvre the “*FV Liberty*” in preparation for the helicopter evacuation of the casualty, the Skipper cut away the cod end of the net, which was lying alongside the port side of the vessel. The lazy deckie rope that failed was attached to the cod end of the net, which was cut away and jettisoned.

Once the helicopter arrived on the scene the Skipper had to jettison fish boxes stored on the forecastle of the vessel to make a landing place for the helicopter Winchman.

3.1 Actions by Emergency Services

At 18.25 hrs on the 14th February 2013 MRSC Valentia picked up very broken communications on Channel 16 requesting the immediate helicopter evacuation of an injured crewman. Communications were so poor that MRSC were unable to fully obtain an exact position. R115, the Shannon based rescue helicopter, which was airborne on a training exercise at the time was tasked.

At 18.29 hrs MRSC sent PAN broadcast requesting information on “*FV Liberty*” and possible injury to a crewman.

At 18.31 hrs “*FV Corona Gloria*” responded to MRSC Valentia and identified the casualty as the “*FV Liberty*”. They passed information regarding the head injury to the crewman and the position of the vessel. This information was passed to R115 at 18.32 hrs.

At 18.42 hrs MEDICO Cork (the National Maritime Telemedical Assistance Service provided by the Emergency Department at Cork University Hospital) was contacted for advice. Due to communication difficulties between MRSC Valentia

and the “*FV Liberty*” it was not possible to place a link call directly between the vessel and MEDICO Cork.

MEDICO Cork advised that the casualty be kept in the sitting position if conscious. This information was relayed to the “*FV Liberty*” by MRSC Valencia and the “*FV Corona Gloria*”.

At 18.43 hrs information was passed to “*FV Liberty*” via “*FV Corona Gloria*” on the High Line Technique to be used for helicopter evacuation of the casualty.

At 18.54 hrs R115 helicopter requested R117 (Waterford based helicopter) be placed on standby in case R115 was unable to complete winching due to fuel constraints.

At 19.09 hrs R115 requested “*FV Liberty*” to increase speed to 5 knots.

At 19.17 hrs R115 advised that the deck of vessel was very small and requested R117 to proceed. R117 was then tasked and Courtmacsherry lifeboat was placed on standby.

At 19.22 hrs the automatic identification system (AIS) indicated that R115 was in the process of winching.

At 19.25 hrs “*FV Liberty*” advised R115 that the casualty had lost consciousness.

At 19.44 hrs Courtmacsherry All Weather Lifeboat was tasked.

Due to the rough sea state conditions, the motion of the vessel and the small deck area, it took until 19.46 hrs to land the Winchman on the deck.

On arrival on the foredeck of the vessel the Winchman noted the casualty being cradled in the lap of the first crewmember who appeared very upset and traumatised; they were positioned on the main deck. The Winchman, who was on the upper deck awaiting the arrival of his medical bag from the helicopter, observed that the casualty had one eye open and the other closed. He signalled to the first crewmember to check if the casualty had a pulse but the crewmember was unable to do so. The Winchman was concerned that the casualty had already died by now, so he signalled for the first crewmember to commence chest compressions while he got his equipment on-board the vessel. The first crewmember attempted chest compressions but ceased very quickly and became very visibly shaken and emotional.

At 19.49 hrs R115 departed the scene for Cork Airport to re-fuel.

Once the Winchman arrived at the casualty’s side he immediately checked for a carotid pulse which was absent. He asked the first crewmember if they had seen

the casualty stop breathing, to which they replied that he had just stopped as the Winchman was waiting for his kit to arrive on-board the vessel.

The Winchman placed the casualty flat on his back and showed the first crewmember how to do chest compressions. The Winchman got an I-Gel airway ready for insertion to secure the casualty's airway before he commenced using a medical Bag Valve Mask (BVM), to deliver 100% oxygen to the casualty. Whilst the Winchman was preparing his equipment, the Skipper joined them and was instructed by the Winchman to take up C-Spine control to reduce the risk of spinal injury. When the Winchman placed his hand on the casualty's head, to tilt the head back for airway insertion, he found that there was a large open fracture to the left side of the skull. Upon inspection he observed the casualty sustained extensive head injuries.

A large pair of dressings was placed on the casualty's skull and secured as best as possible. Once the dressings were secured the Winchman checked for the pulse again but it was absent. With the absence of a pulse, a fixed dilated right pupil, a large open skull fracture and large amounts of blood visible, it was determined that the casualty had an injury that was incompatible to life.

At 19.54 hrs the Winchman advised that the casualty was possibly deceased.

At 20.08 hrs R117 arrived on scene and it was decided to airlift the casualty from the "FV Liberty".

At 20.42 hrs R117 had a stretcher on-board "FV Liberty".

During the winching lift operation the Winchman and stretcher were inadvertently pulled off the deck and a large swing developed to such a degree that the cable made contact with some airframe components of the helicopter. The cable failed in overload and both the Winchman and stretcher entered the water.

The helicopter emergency winching system was immediately deployed and the Winchman managed to re-secure himself and the stretcher to the winch and were recovered. The Winchman later reported that his personal locator beacon (SARBE) did not activate when he entered the water.

At 20.52 hrs R117 reported that the Winchman and stretcher were safely recovered on-board the helicopter.

At 21.01 hrs the Courtmacsherry lifeboat arrived on scene. The lifeboat escorted the trawler to the shelter of Holeopen Bay whereupon two members of the lifeboat crew were transferred to assist the crew of the "FV Liberty". The "FV Liberty" berthed alongside in Kinsale at 01.05 hrs and the lifeboat returned to her mooring in Courtmacsherry at 02.10 hrs.

At 21.50 hrs R117 at Cork Airport, the Winchman was taken to Cork University Hospital by ambulance for a medical check-up. The Winchman suffered some bruising and soft tissue injury but was not detained overnight.

At 22.30 hrs the casualty was pronounced dead at Cork Airport by a Doctor and transferred to the mortuary by ambulance.

3.2 Autopsy Report

The autopsy report on the casualty concluded that the casualty suffered a very significant blunt force trauma to the left side of the head with a very extensive depressed fracture of the skull, tearing of the dura and very severe cerebral trauma. There were no significant injuries to the remainder of the body. There were no defence injuries and the findings are in keeping with the incident described. There was no evidence of drowning.

3.3 Survey & Inspection

The vessel had undergone a Code of Compliance Inspection on the 9th November 2011 and a Flag State Inspection on the 10th December 2012.

The Flag State Inspection found deficiencies with the vessel's fire and safety equipment.

The MCIB inspection of the vessel following the incident highlighted deficiencies with radio equipment, first aid equipment, crew certification and safety equipment.

4. ANALYSIS

The purpose of the analysis is to determine the contributory causes and circumstances of the incident as a basis for making recommendations to prevent similar incidents occurring in the future.

4.1 The Incident

The casualty was standing on the port side of the deck as the fishing gear was being lifted on-board. The connection between the lazy deckie rope and the unidentified split link failed. The split links fell and struck the casualty on the head causing a fatal injury. It could not be determined whether the rope failed or if it was the splice attaching the rope to the unidentified split link.

The failure was sudden and unexpected. The height in which the split links fell from is unknown however, it is likely that it was from a point nearer the head of the derrick.

4.2 Split Links

The split links connecting the lazy deckie and messenger ropes were not a matched pair and were susceptible to becoming jammed when passing over blocks.

4.3 Lifting Equipment

The main items in the vessel's lifting equipment, namely winch, sheaves, split links, blocks and derrick were noted to be in a poor condition. (See Photographs Nos. 4, 5, 6, 7) and (Photographs Nos. 9, 10, 11 & 12 in Appendix 7.3).

The split links fell as a result of a failure of the attachment of the lazy deckie rope to the unidentified split link. The rope was eye spliced to the link and for the failure to have occurred, the eye splice must have pulled out or the rope broke.

If the rope or split links got jammed in the derrick block, the winch could have put forces on the rope or splices that they were unable to withstand. Alternatively, the lazy deckie rope could have been in a poor condition, resulting in its failure.

If the elements in the vessel's lifting equipment had been examined as required by Section 61 of the Safety, Health and Welfare at Work (General Applications) Regulations 2007, the chances of an accident occurring would have been substantially reduced.

4.4 Personal Protective Equipment

No hard hats were provided as required by Section 62 of the Safety, Health and Welfare at Work (General Applications) Regulations 2007 and Fishing Vessel Code of Practice Chapter 6. If hard hats had been provided to the crew, it could have reduced the severity of injury to the casualty.

4.5 Risk Analysis

Whilst there was a Risk Assessment Document provided by the Owner on the vessel it appears to have been a paper exercise. The Skipper was unaware of its existence and no scrutiny of its contents was carried out. The risks associated with the vessel's lifting equipment was not made known to the crewmembers.

No proper assessment of the risks involved or actions to migrate risks was carried out.

There was no verification of the compatibility of the equipment placed on-board in Dunmore East with the existing lifting equipment carried out.

4.6 Crew Training & Experience

None of the crewmembers on-board the vessel at the time of the incident had carried out the mandatory safety training as required by S.I. No. 587/2001 - Fishing Vessel (Basic Safety Training) Regulations, 2001. If the crew had undergone the basic safety training they would have been more aware of the procedures to have been adopted in the emergency.

The Skipper was an experienced fisherman but was relatively new to the vessel. The casualty had only joined the vessel a few hours before the incident and the first crewmember had very limited fishing experience. The first crewmember was tasked to operate the vessel's lifting equipment but would not be considered sufficiently experienced to conduct such a task.

4.7 Radio Equipment

There were several deficiencies in the vessel's radio equipment that prevented clear communication with the emergency services. In particular, it was not possible for MEDICO Cork to communicate directly with the vessel.

4.8 Emergency Services

Air/Sea rescue operations by their very nature are often performed in very hazardous and challenging environments. In particular winching operations conducted at night from an unstable and confined deck space poses significant risk to those involved.

The level and exposure to risk must be considered against the reward of saving life. In this particular incident the Winchman determined that the casualty had suffered a fatal injury on deck. The decision to perform a stretcher lift of a deceased person in such a hostile environment may have exposed the Winchman to unnecessary risk. However, the aviation aspects of this particular incident were the subject of a separate investigation by the helicopter operator.

5. CONCLUSIONS

- 5.1 The casualty was fatally injured as a result of being struck on the head by a pair of split links that fell from a height during the hoisting of the cod end of the trawl net.
- 5.2 The split links fell due to the failure of the attachment of the lazy deckie rope to the split link.
- 5.3 The cause of the failure of the rope could not be ascertained due to the fact that the rope and part of the net was jettisoned overboard in preparation for manoeuvring the vessel for the helicopter recovery operation.
- 5.4 It is known that the split links used for the joining of the lazy deckie to the messenger rope were not compatible and prone to jamming and that the head block used for the lazy deckie messenger ropes were in a poor condition.
- 5.5 Protective head-gear in the form of hard hats was not provided for during the net lifting operation. Provision of same may have reduced the level of injury inflicted on the casualty.
- 5.6 Whilst there was a safety statement on-board the vessel the Skipper and crew were unaware of it and were not familiar with its contents.
- 5.7 None of the crew was experienced or fully conversant with the operation of the vessel or had undergone the basic safety training as required by S.I. No. 587/2001 Fishing Vessel (Basic Safety Training) Regulations, 2001.
- 5.8 If the crew had undertaken the basic safety training, they would have been better prepared to deal with the unfolding events that occurred on the night of the incident.
- 5.9 The vessel's radio equipment was in poor condition, communications were difficult and as a result vital medical information could not be provided directly to the vessel.
- 5.10 The vessel did not comply with the requirements of the Fishing Vessel Code of Practice. The deficiencies in place on-board "*FV Liberty*" during the MCIB investigation showed that risk assessment was not completed, annual inspection was not carried out for lifting equipment, and personnel had not completed the required training.

6. SAFETY RECOMMENDATIONS

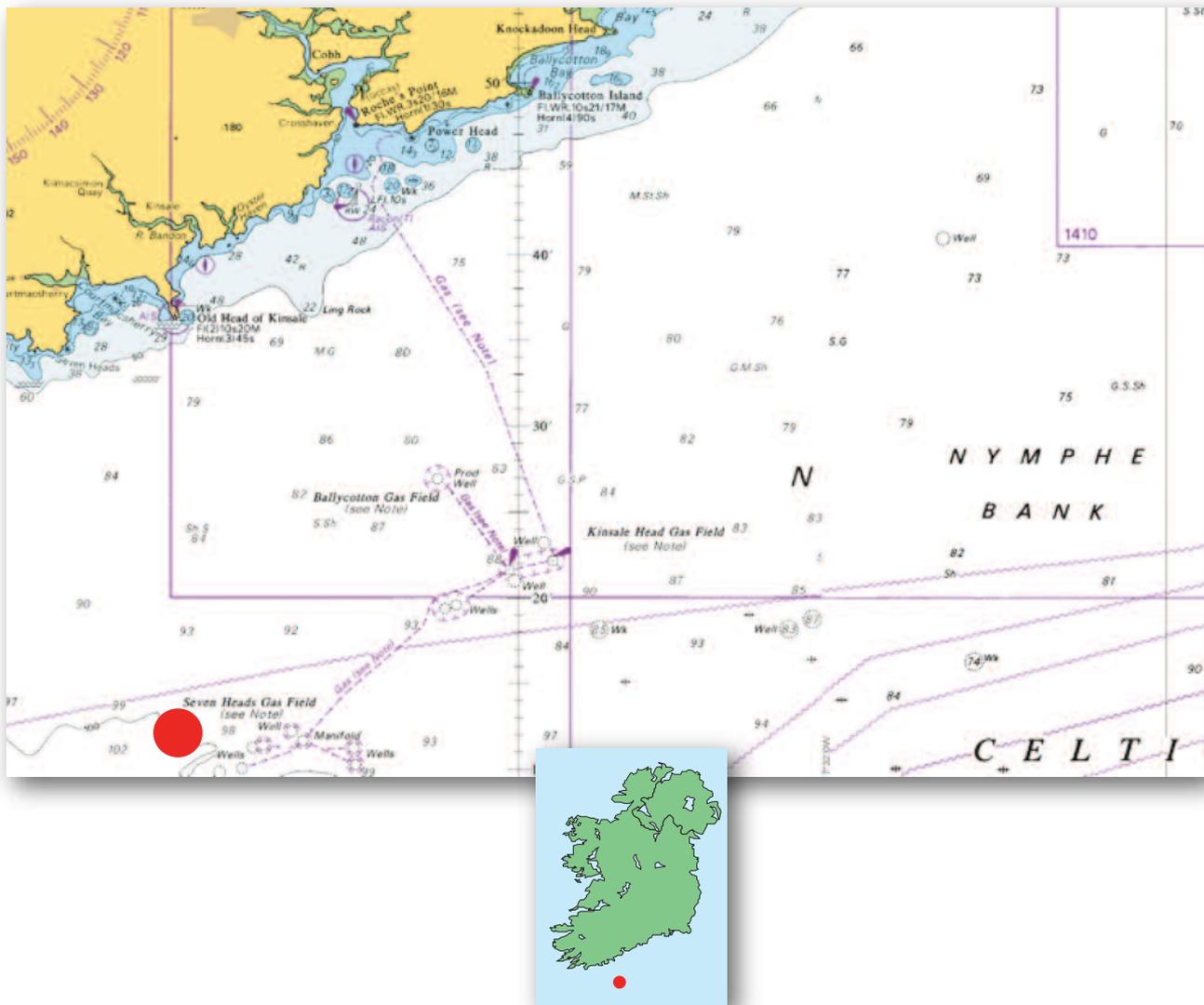
- 6.1 That the Minister for Transport, Tourism & Sport should include the requirement that lifting equipment comes within the scope of the Code of Practice Survey.
- 6.2 That Owners and Skippers should comply with all the requirements of the Code of Practice and specifically as per Chapter 4.5, which deals with Fishing & Handling Equipment.
- 6.3 That Owners and Skippers should comply with the Safety, Health and Welfare at Work (General Applications) Regulations 2007 for inspection and certification of lifting equipment.
- 6.4 That Owners and Skippers should ensure all crew when working on deck are wearing the appropriate personal protective clothing.

7. APPENDICES

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APPENDIX 7.1

Appendix 7.1 Approximate Location of Casualty.



Appendix 7.2 Met Éireann Weather Report.



Appendix 7.2 Met Éireann Weather Report.



MET ÉIREANN
The Irish Meteorological Service

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Beaufort Scale of Wind					
Force	Description	Speed*		Specification -sea	Wave height** (metres)
		knots	km/hr		
0	Calm	<1	<1	Sea like mirror	
1	Light air	1-3	1-5	Ripples	0.1 (0.1)
2	Light breeze	4-6	6-11	Small wavelets	0.2 (0.3)
3	Gentle breeze	7-10	12-19	Large wavelets, crests begin to break	0.6 (1)
4	Moderate breeze	11-16	20-28	Small waves becoming longer, frequent white horses	1 (1.5)
5	Fresh breeze	17-21	29-38	Moderate waves, many white horses, chance of spray	2 (2.5)
6	Strong breeze	22-27	39-49	Large waves, white foam crests, probably some spray	3 (4)
7	Near gale	28-33	50-61	Sea heaps up, streaks of white foam	4 (5.5)
8	Gale	34-40	62-74	Moderately high waves of greater length	5.5 (7.5)
9	Strong gale	41-47	75-88	High waves, dense streaks of foam, spray may reduce visibility	7 (10)
10	Storm	48-55	89-102	Very high waves, long overhanging crests, visibility affected	9 (12.5)
11	Violent storm	56-63	103-117	Exceptionally high waves, long white foam patches cover sea	11.5 (16)
12	Hurricane	64+	117 & over	Air filled with foam and spray, sea completely white	14 (-)

*Speed a mean speed at a standard height of 10 metres.
**Wave height is only intended as a guide to what may be expected in the open sea.
Bracketed figures indicate the probable maximum wave height.

Wave Heights / State of Sea
The wave height is the vertical distance between the crest and the preceding or following trough. The table below gives a description of the wave system associated with a range of significant wave heights. The Significant wave height is defined as the average height of the highest one-third of the waves. (It is very close to the value of wave height given when making visual observations of wave height.)

Sea State (Descriptive)	Significant Wave height in meters
Calm	0 – 0.1
Smooth (Wavelets)	0.1 – 0.5
Slight	0.5 – 1.25
Moderate	1.25 – 2.5
Rough	2.5 – 4
Very rough	4 – 6
High	6 – 9
Very high	9 – 14
Phenomenal	Over 14

Individual waves in the wave train will have heights in excess of the significant height. The highest wave of all will have a height about twice the significant height

Visibility Descriptions of visibility mean the following:

Visibility (Descriptive)	Visibility in nautical miles (kilometres)
Good	More than 5 nm (> 9 km)
Moderate	2 – 5 nm (4 – 9 km)
Poor	0.5 – 2 nm (1 – 4 km)
Fog	Less than 0.5 nm (< 1km)

Note:

If there are no measurements or observations available for an exact location, these estimated conditions are based on all available meteorological measurements and observations which have been correlated on the routine charts prepared by Met Éireann.

Appendix 7.2 Met Éireann Weather Report.

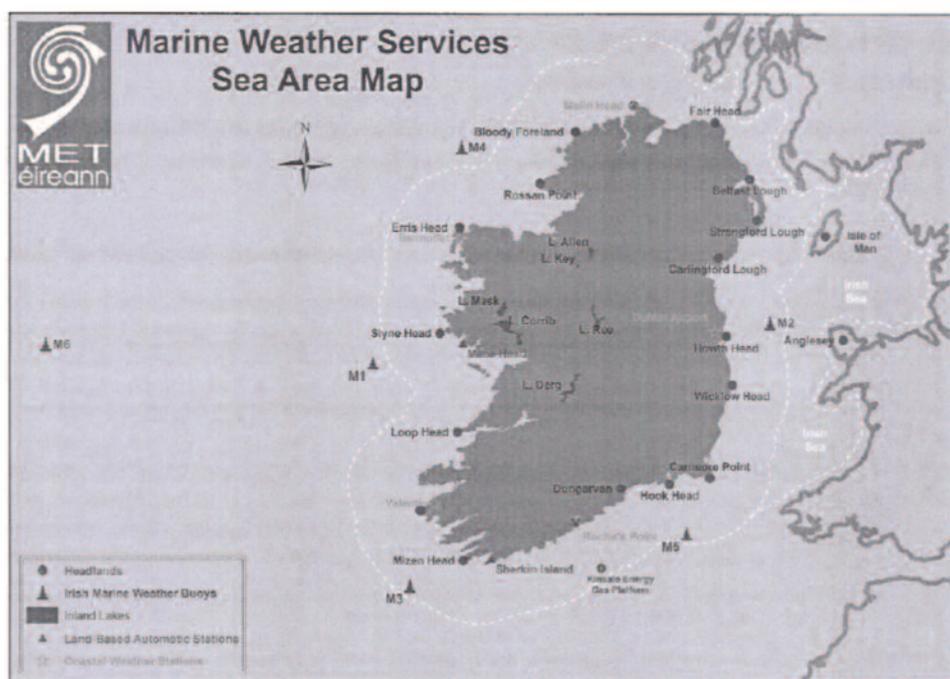


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Appendix 7.3 Photographs.

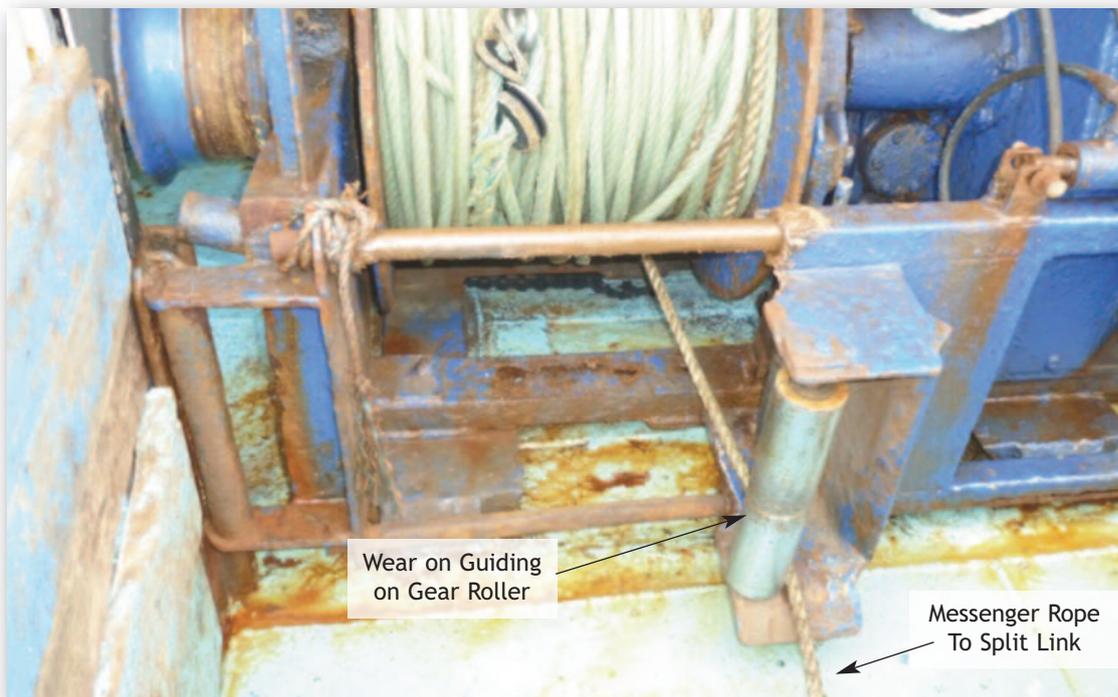


Photograph No. 9: Winch Break Band
Note Excessive Corrosion. The Winch was being used in the Lifting Operations



Photograph No. 10: Wear in Winch Guiding on Gear Securing Arrangement

Appendix 7.3 Photographs.



Photograph No. 11: Winch Guiding on Gear
Note Wear on Guiding on Gear Roller



Photograph No. 12: Winch Corroded Foundations

8. CORRESPONDENCE RECEIVED

PAGE

8.1 Correspondence from P.J. O’Driscolls Solicitors and MCIB response. 32

Note: The names and contact details of the individual respondent have been obscured for privacy reasons.

Correspondence 8.1 P.J. O'Driscolls Solicitors (Page 1) and MCIB response

P. J. O'Driscolls
S O L I C I T O R S



Marine Casualty Investigation Board
Leeson Lane
Dublin 2
(fax 01 678 3493)

41 South Main Street,
Bandon,
Co. Cork.
Tel: +353 (0)23 8866800
Fax: +353 (0)23 8844669
DX 13 006

Our Ref: 7/SK/P4256
Your Ref: MCIB/12/230

19 June 2014

Re: Accident on Fishing Boat "Liberty".

Dear Sirs,

We are the Solicitors acting on behalf of [REDACTED] skipper of the FV "Liberty" and we refer to your draft report dated the 21st of May submitted to her under the above reference regarding the fatal incident which occurred on board the said vessel on the 14th of February 2013. Our client is due to have her second child in the next few days and accordingly she has asked us to write to you with her observations in respect of the draft report, which we set out hereunder in a manner which we hope you can follow as we are addressing certain matters in the draft report.

2.1 Crew particulars: The record of the first member of the crew's experience is inaccurate. She had four months fully on board the vessel and a further three months during holidays.

The second crew member was 23 years of age.

2.3 Radio equipment: Our client says that the Cobra VHF had no MMSI number on it. She further says that the sailor RT 2048 VHF had the correct MMSI number on it.

2.5 Lifting Equipment: (a) The reference to cod end derrick is incorrect. It was a Gilson derrick
(b) the lazy derrick is also known as a Gilson rope and should be referred to as such. It is not known as a splitter rope or bag rope in our client's respectful submission and
(c) connection (split C-clip) a G ring was not used. Please note.

Page 8/9 photograph 2/3: 1. Change reference to "cod end derrick" to Gilson derrick"
2. Change messenger rope to lazy Deckie and reference to lazy deckie rope to bag rope.

Page 9: Our client disagrees with the sentence "The positioning of the pair of blocks would be prone to jamming ropes passing through one of the blocks". Our client says that one can see the unused block. It is higher and fastened and clear of the used block. See photograph 6.1 showing the used block lower and the other one higher and made fast.



Ied Hallissey, P.J. O'Driscoll, Geraldine Crean, Maeve O'Driscoll, Susan Lee, Anthony Coomey, Paul Westcott
Gleen Hynes, Macaire McCauley Adams, Kate Hallissey, Julie Galloway, Maura Crean, Helene O'Donovan, Lisa Crowley

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V A T No. IE 0435334 H



MCIB RESPONSE:
This person referred to in this letter (name withheld) was not the Skipper and was not present on the vessel at time of incident.

MCIB RESPONSE:
Information received in respect of this crewmember's experience was provided by the individual directly to the investigator. The age of the casualty used in the draft report was taken from the original autopsy report given to the MCIB. Following receipt of the amended autopsy report, the age has now been amended to read age 24 (DOB 11/12/88). The MCIB has amended the report accordingly.

MCIB RESPONSE:
The Board notes that the Radio Surveyor's report indicates that Cobra VHF had incorrect MMSI number programmed into it.

Correspondence 8.1 P.J. O'Driscolls Solicitors (Page 1 repeated) and MCIB response

P. J. O'Driscolls
SOLICITORS

41 South Main Street,
Bandon,
Co. Cork.
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Fax: +353 (0)23 8844669
DX 13 006

Marine Casualty Investigation Board
19 JUN 2014
Bord Imscrúdú Tasimí Muiri

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MCIB RESPONSE:
The Board notes this comment. The vessel was not fitted with a Gilson winch, the derrick that was in use at the time of incident was bringing in the cod end. Different names are frequently used for the same items of equipment, photographs 2 to 11 of the report clearly shows the equipment used and the names referred to in the report. The Board has amended "split G Rings" to read "split links" in paragraph 2.5.

MCIB RESPONSE:
The Board notes this comment. Different names are frequently used for the same items of equipment, photographs 2 to 11 of the report clearly shows the equipment used and the names referred to in the report.

MCIB RESPONSE:
The Board notes this comment.

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Ied Hallissey, P.J. O'Driscoll, Geraldine Crean, Maeve O'Driscoll, Susan Lee, Anthony Loomney, Paul Westcott
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Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 2) and MCIB response



Page 11 - Reference to Photograph No. 8: Our client disputes the conclusion that the two split or C links were not able to move freely through the blocks and over the sheaves. The block was wide enough/ big enough to carry both the split links irrespective of how they were connected to each other.

MCIB RESPONSE:
The Board notes this comment.

Page 12, fifth paragraph – reference to an unidentified split “G” link in the fourth paragraph is incorrect. It should refer to a “C” link.

MCIB RESPONSE:
The Board notes this comment and has amended the report accordingly to change “split ‘G’ link” to read “split links”.

Paragraph 6: Our client says that it is relevant that at the time of the accident the COP (Code of Practice) panel of surveyors was not aware of the requirement of certification of lifting equipment for vessels such as this and she as owner was never asked to undergo this certification and was never made aware of its existence by any of the COP surveyors involved with her vessel. Furthermore when the testing was done by Hook & Hoist in April 2013 without any works being carried out to the vessel, the lifting equipment passed and was found to be acceptable without amendment.

MCIB RESPONSE:
Please see safety recommendations on page 22.

Page 13: This is saying what the risk assessment says and the risk assessment predates the date of the accident. He is not saying that they were not, he is saying that that is what the document says but the skipper was not aware of that document.

The Board notes the condition of the lifting equipment on the date of the incident was a finding of fact.

2.7 Previous failures of lifting equipment: There was no previous failure of lifting equipment resulting to an injury to a crew member. A previous Skipper sustained a head injury while at sea which was occasioned by his own negligence in the tying of a rope. It did not involve the lifting equipment and this paragraph is entirely untrue and its inclusion is completely prejudicial to our client.

Page 14

3. Narrative: Final words on page 14 should be “Gilson derrick” not “landing derrick”.

MCIB RESPONSE:
The Board notes this comment.

Page 15, First paragraph: The reference to “cod end derrick” is incorrect. It should refer to “Gilson derrick”.

Third paragraph: Once the lazy deckie was clipped on, the Skipper returned to the wheelhouse, brought the boat into position to haul aboard the cod end, then returned to the deck and positioned himself on the port side of the vessel near the fish conveyor system and in that position had a clear view of the casualty who was standing towards the aft end of the vessel so as to be out of the way of the suspended load.

Seventh paragraph: The cod end of the net had to be cut away and jettisoned because the boat could not keep a straight course or be steered with the net weight out behind the vessel.

MCIB RESPONSE:
The Board notes this comment and was made aware of this previous incident during the investigation.

Page 17, Fifth paragraph: “He signalled to the first crew member to check if the casualty had a pulse but the crew member was unable to do so”. Delete to do so and insert “to get a pulse”.

Page 19 3.3. Survey & Inspection: Add to second paragraph “These deficiencies were corrected and the corrections approved”.

Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 2 repeated) and MCIB response



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Page 19 3.3. Survey & Inspection: Add to second paragraph "These deficiencies were corrected and the corrections approved".

MCIB RESPONSE:
The Board notes this comment and amended the report to read 'cod end derrick'.

MCIB RESPONSE:
The Board notes this comment and states cod end derrick is the correct terminology.

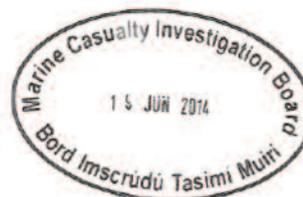
MCIB RESPONSE:
The Board notes this comment and states this information was provided by the Skipper of the vessel, who was present at the incident.

MCIB RESPONSE:
The Board notes this comment and states this information was given by the Skipper of the vessel.

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The Board notes this comment and states this information was given by the Skipper of the vessel.

MCIB RESPONSE:
The Board notes this comment. Deficiencies as described were present at time of incident.

Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 3) and MCIB response



Add to Third paragraph "The MCIB inspection of the vessel following the incident highlighted deficiencies with radio equipment, first aid equipment, crew certification and safety equipment. These deficiencies were corrected".

MCIB RESPONSE:
The Board notes this comment. Deficiencies as described were present at time of incident.

Page 20, 4.1: - Should correctly be "The connection between the bag rope and the unidentified split link failed.

MCIB RESPONSE:
The Board notes this comment. Different names are frequently used for the same items of equipment, photographs 2 to 11 of the report clearly shows the equipment used and the names referred to in the report.

4.2: Our client disputes the contents of this paragraph. The block was big enough to take even jammed split links through them and there is no suggestion that the block size in any way contributed to the accident.

4.3 Second paragraph: – The reference to lazy deckie rope should be changed to bag rope and the reference to messenger rope should be changed to lazy deckie rope.

Page 21, first paragraph our client feels should read

"If a rope or split links got jammed in the derrick block the winch could put forces on the rope or splices that they would be unable to withstand. In this instance the bag rope clearly failed. It may have been in poor condition resulting in its failure. It has been lost.

Our client disputes entirely that if the elements of the lifting equipment had been examined as required by Section 61 that the chances of the accident occurring would have been substantially reduced. Neither the lifting equipment nor its condition failed. What failed was a bag rope attached to a split link. When tested the lifting equipment passed this inspection entirely without amendment.

MCIB RESPONSE:
The Board notes this comment.

4.4. Personal Protective Equipment: Our client points out that the Code of Practice Protection of Crew, a copy of which we attach, does not include a requirement for a hard hat.

4.5 Risk Analysis: "There was no verification of the compatibility of the equipment placed onboard in Dunmore East with the existing lifting equipment carried out". This is true. The net that was used was the skipper's net so this is true.

Page 22, 4.6: Our client points out that the record that you have of the first crew member's experience is inaccurate.

MCIB RESPONSE:
The Board notes this comment. Different names are frequently used for the same items of equipment, photographs 2 to 11 of the report clearly shows the equipment used and the names referred to in the report.

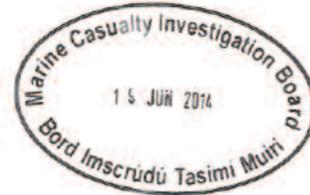
4.7 Radio Equipment: Our client points us that the reason it was not possible for MEDICO Cork to communicate directly with the vessel was that it was fishing at the outer extremity of the VHF range and the weather was not good. The deficiencies in the vessel's radio equipment were not the cause of this difficulty and these factors should be taken into account.

Conclusions

5.1, Second paragraph: the attachment of the bag rope – not the lazy deckie rope failed.

MCIB RESPONSE:
The Board notes this comment.

Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 3 repeated) and MCIB response



Add to Third paragraph "The MCIB inspection of the vessel following the incident highlighted deficiencies with radio equipment, first aid equipment, crew certification and safety equipment. These deficiencies were corrected".

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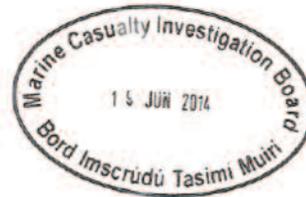
MCIB RESPONSE:
The Board notes this comment and points out that the statutory requirement is that personal protective equipment be provided. Please refer to the Code of Practice attachment 6.1.5. The risk assessment for the "FV Liberty" states in the section entitled Personal Working Gear: *All crewmembers have suitable oilskins, gloves, safety boots with toe and sole protection.* This item is ticked as in place. *Hard hats are provided and worn when slinging or lifting loads.* This item is ticked as not done.

The Owner signed a safety policy, which states: *Provide Personal Protective Equipment for everyone on-board including a Personal Flotation Device (PFD) and ensure they are worn.*

MCIB RESPONSE:
The Board notes this comment.

MCIB RESPONSE:
Please refer to previous comment at 2.1.

Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 3 repeated) and MCIB response



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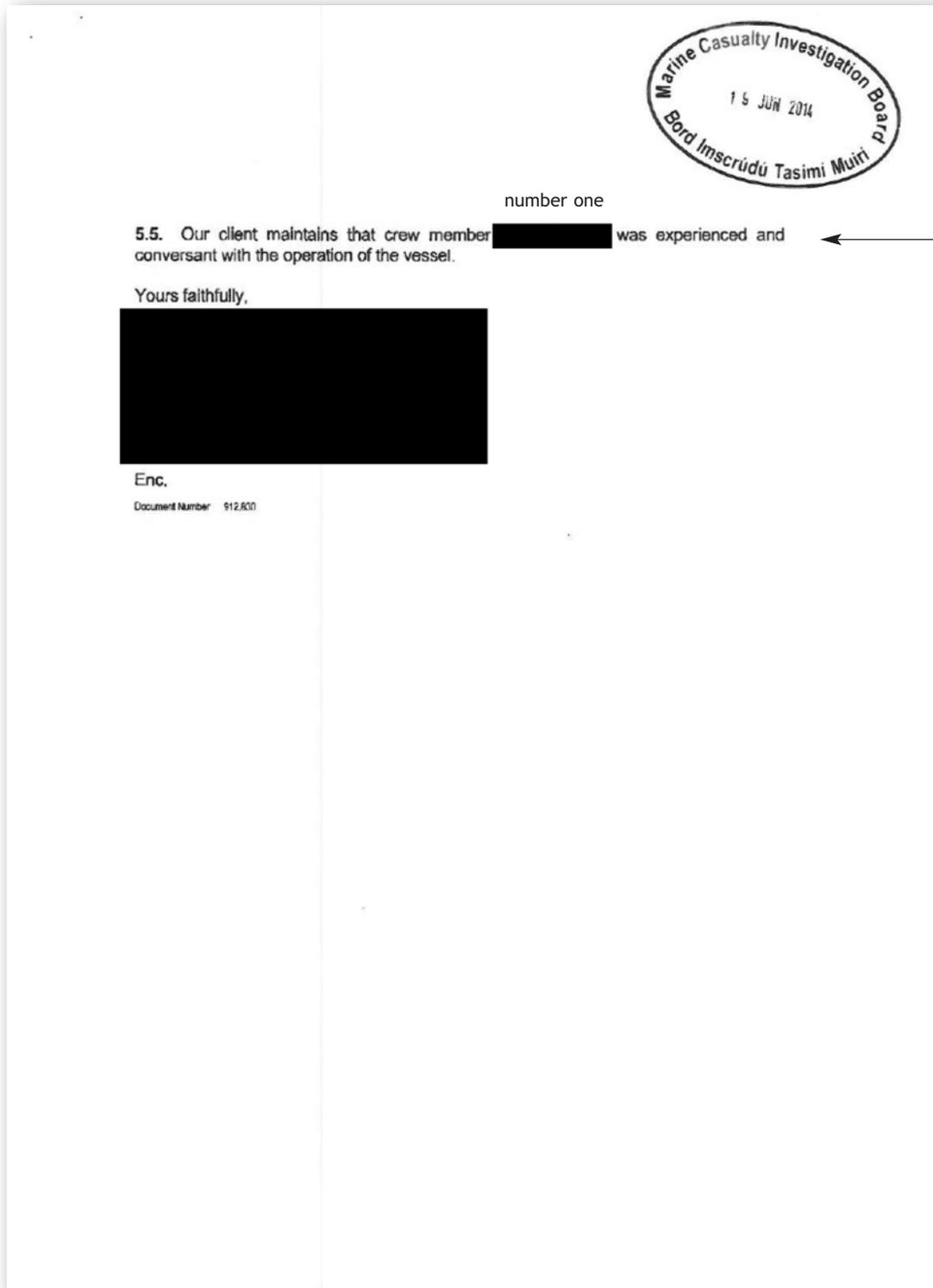
MCIB RESPONSE:
The Board notes this comment and states the radio equipment was defective. The vessel had radio equipment on-board for the A1 area.

In the Code of Practice the A1 area is defined as: "A1 means an area within the radiotelephone coverage of at least one VHF coast station in which continuous alerting by Digital Selective Calling is available".

The Owner statement implies that the vessel was operating outside of the A1 range, therefore the vessel was not in Compliance with the Code of Practice and should not have been operating in the area of the incident.

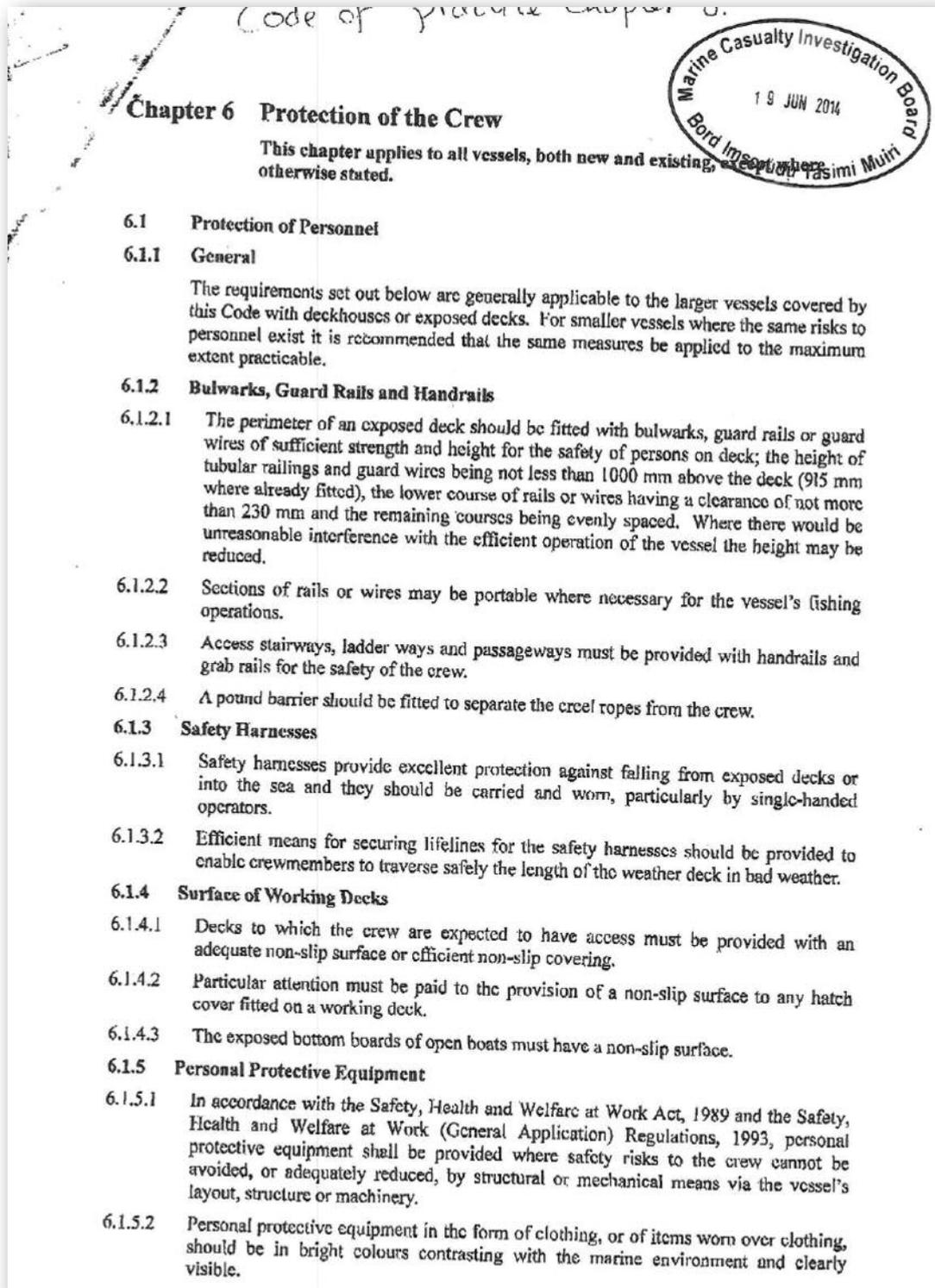
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Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 4) and MCIB response



MCIB RESPONSE:
Please see comment 2.1 in relation to crew particulars.

Correspondence 8.1 P.J. O'Driscolls Solicitors (Page 5) and MCIB response



Correspondence 8.1 P.J. O’Driscolls Solicitors (Page 6) and MCIB response

