

ACCIDENT REPORT

VERY SERIOUS MARINE CASUALTY

REPORT NO 13/2016

JUNE 2016

Extract from The United Kingdom Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 – Regulation 5:

"The sole objective of the investigation of an accident under the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 shall be the prevention of future accidents through the ascertainment of its causes and circumstances. It shall not be the purpose of such an investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame."

NOTE

This report is not written with litigation in mind and, pursuant to Regulation 14(14) of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

© Crown copyright, 2016

You may re-use this document/publication (not including departmental or agency logos) free of charge in any format or medium. You must re-use it accurately and not in a misleading context. The material must be acknowledged as Crown copyright and you must give the title of the source publication. Where we have identified any third party copyright material you will need to obtain permission from the copyright holders concerned

All reports can be found on our website: www.gov.uk/maib

For all enquiries:

Email: maib@dft.gsi.gov.uk Tel: 023 8039 5500 Fax: 023 8023 2459 Fatal man overboard accident from the fishing trawler *Enterprise* (PD147) North of Dogger Bank, North Sea 9 July 2015

SUMMARY

At around 0415 on 9 July 2015, Jan de Boer, the skipper of the fishing trawler *Enterprise* (Figure 1), fell overboard through one of the vessel's ports for shooting fishing nets when he lost his footing in rough weather. He was not wearing a lifejacket or other buoyancy aid. The vessel was 16nm north of the Dogger Bank in the North Sea.

The crew took between 30 and 40 minutes to recover the skipper, and their subsequent efforts to resuscitate him were unsuccessful.

Image courtesy of worldfishingtoday.com



Figure 1: Fishing vessel Enterprise

During the course of the investigation, the MAIB identified that:

- The shooting ports did not comply with the minimum bulwark height requirements.
- The onboard risk assessment regarding falling overboard was inadequate.
- · Manoverboard drills were inadequate and infrequent.
- No contingency plans existed for the loss or incapacitation of the skipper.
- The statutory crew competency requirements were not met, the vessel was carrying more crew members than was permitted, and it was also carrying a 13 year old boy.
- The vessel's owner had not reported another man overboard incident that had occurred 3 weeks earlier.

The Maritime and Coastguard Agency (MCA) has revised the relevant Merchant Shipping Instructions to Surveyors (MSIS 27) to ensure that the bulwark height requirements are properly applied to all UK flag fishing vessels and has commenced a targeted campaign to implement these instructions.

The owner of *Enterprise* has been recommended to: review its vessels' risk assessments to ensure that they properly consider the risks of falling overboard and the loss or incapacitation of the skipper while at sea; and put in place procedures to ensure it complies with the regulatory¹ requirements for the reporting of accidents.

FACTUAL INFORMATION

Background

Enterprise worked out of Harlingen in The Netherlands, normally leaving port before daybreak on Monday morning and returning by Friday evening. The vessel had been following this routine since 2010. After landing the catch on Friday 3 July, the majority of the predominantly Dutch crew, all members of the vessel owner's extended family, went home for the weekend, leaving a Filipino crew member on board.

Narrative

At 0200 on 6 July, *Enterprise* sailed out of Harlingen with nine persons on board: the skipper, Jan de Boer, seven crew and the skipper's 13 year old nephew. The crew spent the next 3 days fishing in the North Sea around the Dogger Bank area.

At around 2200 on 8 July, the crew shot the nets with *Enterprise* steaming in a north-westerly direction, maintaining a speed of around 3 knots² (kts). The sea was rough with up to 4m high waves and a north-westerly gale gusting up to 35 kts. The skipper went to his cabin to rest, leaving a deckhand on watch. Shortly after 0245, the skipper returned to the wheelhouse and asked the deckhand to sound the crew wake-up bell, and by 0315 the crew were on deck hauling in the nets. The skipper was alone in the wheelhouse and the 13 year old boy was asleep in his cabin.

On hauling up the port net, it became apparent that a large rock had become trapped in the net, damaging it. The skipper instructed the crew to repair the port net and also the starboard net which had been damaged earlier. Six of the crew laid the damaged areas of the nets out on the poop deck and started working on them, three to each net. The seventh crew member was on the main deck, removing debris from the catch.

¹ Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, as amended.

² knots = a measure of speed, it measures nautical miles an hour (1 nautical mile = 1850metres)

A short while later, the skipper left the wheelhouse and went aft to where the crew were repairing the nets. He was dressed in casual clothes, with slip-on shoes, and he was not wearing a lifejacket. He instructed the cook to fetch a 10m x 1.5m piece of spare net to replace a torn section at the cod end of the starboard net. The cod end was partially laid out on deck between the starboard net drum and the shooting port (**Figure 2**). Standing on the net, the skipper started to cut out the damaged section when the vessel pitched forward, throwing him against the net drum. Seconds later, the vessel pitched aft and the skipper lost his footing on the net and fell backwards through the starboard shooting port. It was estimated that he fell overboard at around 0415 and the vessel was making a speed of 1.5kts at the time.



Figure 2: Working space aft of the net drums

The rescue

When he re-surfaced, the skipper was approximately 30m astern of the vessel and, although the crew had thrown two lifebuoys towards him, he was unable to reach them. The skipper shouted to the crew to come astern and the nominated engineer³ ran up to the wheelhouse and put the vessel astern. He did not use the steering but brought the engine controls to stop and de-clutched the propeller shaft when he saw the skipper off the vessel's port quarter.

The skipper, who was now on the weather side of the vessel, managed to reach one of the lifebuoys and put it around himself. Meanwhile, the cook donned a survival suit, secured himself to the vessel with a lifeline and jumped into the water to help the skipper. The remaining crew members deployed the pilot ladder from the main deck and the vessel's Markus net⁴ from the port catwalk railing, approximately 3m forward of the pilot ladder (**Figure 3**).

³ Nominated engineer – the crewman nominated as the vessel's engineer but not specifically qualified for the role

⁴ Markus net: Manoverboard rescue unit that consists of a moveable storage container, lifting lines, net structure, throw-line and chest-loop. <u>http://www.markusnet.com</u>



Figure 3: Pilot ladder and Markus net deployment positions (inset: opening for pilot ladder)

The skipper managed to get hold of the line from the Markus net and the crew, using the lifebuoy's lanyard, pulled him close to the pilot ladder. Once he was within reach, the skipper grabbed the ladder with one hand and let go of the Markus net. However, just as he was preparing to step onto the pilot ladder a heavy swell caused the sea to drop away from under him, and he lost his grip on the ladder. At this point, the cook, who was experiencing difficulty in breathing, asked to leave the water. He was replaced by the second-skipper who was also wearing a survival suit and secured to the vessel by a lifeline.

The second-skipper attached the deck crane hook to the skipper's lifebuoy lanyard and the crew attempted to lift the skipper out of the water using the deck crane. As soon as the crane took his weight, the lanyard parted and the skipper dropped back into the water, slipped out of the lifebuoy and disappeared under the surface. Another crew member, also wearing a survival suit, joined the second-skipper in the water to search for the skipper. When one of the skipper's legs broke the surface of the water the two men got hold of him and, struggling to keep his head out of the water, they put a lifebuoy around him, attached a rope to his legs and instructed the crew on deck to lift him onto the vessel with the crane. He was brought on board through the pilot door. The skipper was now unconscious, not breathing and his eyes were fixed open. The crew estimated that he had been in the water for 30 to 40 minutes.

Revival efforts

The skipper was laid on his back on the deck and the nominated engineer started mouth to mouth resuscitation, handing over to another crew member when he became tired. Their efforts to revive him appeared to have little effect.

The nominated engineer then returned to the wheelhouse and broadcast a "Mayday" message using channel 16 on the very high frequency (VHF) radio. A fishing vessel responded to the distress call, but was told that their assistance was not required as the casualty had already been recovered back on board. The nominated engineer was surprised that he received no response from the coastguard.

The crew then attempted to use the defibrillator to resuscitate the skipper. However, it instructed them to continue CPR⁵ and would not administer an electric shock as no electrical activity was detected from the skipper's heart. At 0508, the nominated engineer contacted the Dutch coastguard by satellite telephone and he was subsequently connected to a doctor. By 0530, the doctor asked the crew to stop the resuscitation attempts as the skipper was not showing any signs of life and, at 0531, he pronounced the skipper deceased.

Enterprise arrived at Harlingen at around 2100. An autopsy was not carried out, but a forensic doctor examined the body and concluded the cause of death to be a combination of hypothermia and drowning. Toxicology tests detected neither alcohol nor recreational drugs in the skipper's blood.

Company

Ekofish Group, the owner manager of *Enterprise* and another UK registered fishing vessel, *Annegina,* was a family owned company based in the Netherlands. Ekofish managed the technical, crewing and commercial aspects of the business. The company was represented in the UK by Danbrit Shipmanagement based in North Yorkshire.

⁵ Cardiopulmonary resuscitation

Vessel

Enterprise was converted from a beam trawler into a twin rigged stern trawler in 2006 by Kynde & Toft in Denmark (**Figure 4**). The drawings for conversion, including the stern net shooting ports, were subjected to full structural design approval by Lloyd's Register (LR) in Rotterdam. The design was assessed as meeting the Lloyd's Register Rules and Regulations for the Classification of Ships 2005 and, when the modification work was conducted, the work was surveyed by LR surveyors to ensure that it was in accordance with the approved design and that appropriate construction methods were employed.

Kynde & Toft estimated that it had converted nearly 100 vessels to stern trawlers with a similar open shooting port design. However, the majority had been fitted with temporary closing arrangements to make them safe when not in use.

Following the conversion, the MCA granted *Enterprise* an exemption from the requirement⁶ to carry a manoverboard rescue boat. This exemption imposed several conditions on the operation of the vessel, including a maximum limit of six persons permitted to be carried on board, the carriage of approved manoverboard recovery equipment and the provision of survival suits for all crew members.

Persons on board

Enterprise was required by the Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations 1984 to carry a minimum of four certified crew members: Class 1 and Class 2 fishing vessel deck officers' certificate holders and Class 1 and Class 2 fishing vessel engineer's certificate holders.

The skipper, Jan de Boer, was 51 years old, weighed 120kg and was 182cm tall. He smoked 150gm of tobacco a week and was on medication for a thyroid-related condition. He held a Dutch fishing vessel skipper's certificate for vessels less than 60m in length. This certificate also permitted him to work as an engineer on board fishing vessels. He had a Class I deck officer (fishing) certificate of equivalent competency (CEC) issued by the UK administration.

The second-skipper held a Dutch certificate of competency enabling him to work as a substitute skipper on fishing vessels less than 45m in length. He did not have a UK CEC. None of the other crew members, including the nominated engineer, were qualified to work on *Enterprise* in any capacity other than deckhand.

The skipper and six of the crew members were part of the extended family that owned the vessel. The cook and the Filipino rating were in their early thirties, four crew members were in their early twenties and one was 18. All but the youngest of the crew had completed the four mandatory Seafish certificates⁷. The two youngest crew members had been at sea for less than a month.

At the time of the accident, in addition to the skipper and seven crew members normally carried, the skipper's 13 year old nephew was on board as a part of his summer holiday. The MCA had not been made aware of the carriage of any additional persons.

Working environment and layout

The skipper required all crew to wear self-inflating lifejackets when working on deck. 'Mullion Compact 150N' working lifejackets, supplied by SeaFish, were available for all on board.

The net drums were located in the middle of the poop deck providing 9.5m² working area aft of the drums (**Figure 2**) and 8m² forward of the drums (**Figure 5**). The hydraulic controls for the two net drums were located at the inboard end of each drum. The net repair kit was also stored in this area and the spare nets were being stored in a space directly below the poop deck.

⁶ Rule 78 of the Fishing Vessels (Safety Provisions) Rules, 1975, as amended

⁷ Sea survival, Fire-fighting, First-aid, Health and safety



Figure 4: Enterprise before and after conversion to a stern trawler



Figure 5: Working space forward of the net drums

Surveys and inspection

LR was the classification society for *Enterprise*. Class surveys were completed in January 2015 following which an interim certificate was issued.

The MCA carried out a survey of the vessel in Harlingen in February 2015 prior to issuing the International Fishing Vessel Certificate (IFVC) in March 2015. The attending surveyor commented in the survey report that: the crew should read and signify agreement with the vessel's risk assessment; and the master should review it annually. During the survey, the net shooting area aft of the net drums was visited by the attending surveyor.

Drills and training

Logbook records indicated that a manoverboard drill had been conducted in October 2014. The MCA witnessed a further drill in February 2015 when it also tested the crew's knowledge of and use of the Markus manoverboard recovery equipment. The Markus net was deployed from the catwalk onto the main deck in order to avoid asking crew members to enter the water.

A training manual available on board contained detailed manoverboard procedures, including the manoeuvring of the vessel during the rescue of a casualty, the creation of a lee to aid the recovery and the use of the Markus net.

Risk assessments

The vessel's risk assessment was based on the Fishing Vessel Safety Folder provided by Seafish. The hazard of crew members not being visible from the control position while handling the net, and the possible consequence of being dragged overboard, was addressed by requiring the crew to stand forward of the net drums while fishing.

The hazard of crew members working in exposed positions, with the consequence of falling overboard while heaving in the net, had been identified as 'very unlikely', and no control measures had been specified. Under the activity 'General working on the deck of the vessel', the risk of falling overboard and drowning was identified as 'highly likely'. The control measure was identified as crew training. The use of lifejackets while working on deck was not mentioned in the risk assessment document.

Regulations

The IFVC issued in March 2015 confirmed that *Enterprise* was surveyed in accordance with Regulation I/6 (1) of the Annex to the 1993 Torremolinos Protocol⁸; and Rule 124 of the Fishing Vessels (Safety Provisions) Rules, 1975 (incorporated in MGN 501(F)⁹). The IFVC also stated that the vessel complied with the requirements of Council Directive 97/70/EC¹⁰.

The Torremolinos Protocol requires that, for the safety of the crew, a barrier must be maintained at deck level to prevent the crew from falling overboard. This barrier must be at least 1000mm high, including a minimum 600mm of bulwark. Any remainder may consist of guardrails or taut wires of sufficient strength. Exemption to these requirements could only be granted by the MCA on a case-by-case basis. *Enterprise* had no such exemption.

Previous accidents

From 1992 up to and including this accident there have been 116 fatal man overboard accidents on UK fishing vessels. Details of recent man overboard accidents involving stern trawlers can be found in the MAIB report on the investigation of a person overboard from the fishing vessel *Beryl* (BF 440), with the loss of one life, west of the Shetlands Islands on 10 February 2015¹¹.

Three weeks before the accident the skipper of Ekofish's other vessel, *Annegina*, a brother of *Enterprise*'s deceased skipper, fell overboard during fishing operations. The sea conditions were benign and a crew member jumped into the water to assist the skipper, who was subsequently rescued. This incident was not reported to anyone - including the MAIB - and, despite repeated requests by the MAIB, Ekofish has not been forthcoming with any further details about the incident.

⁸ Torremolinos international convention for the safety of fishing vessels

⁹ MGN 501(F): Code of Practice for Fishing Vessels of 24 metres and Over

¹⁰ Directive 97/70/EC Setting up a harmonised safety regime for fishing vessels of 24 metres in length and over

¹¹ <u>https://www.gov.uk/maib-reports/person-overboard-from-twin-rig-trawler-beryl-with-loss-of-1-life</u>

ANALYSIS

Summary

The skipper of *Enterprise*, Jan de Boer, fell overboard through the unprotected net shooting port on the starboard side of the vessel's stern. He had been standing on a fishing net that offered very little traction against the smooth deck, and he was wearing inappropriate footwear. The vessel pitched violently and the net, with the skipper on it, slid, first throwing him forward against the net drum and then immediately aft. With his back to the shooting port, the skipper was unable to stop himself from falling through it into the sea.

The skipper was not wearing a lifejacket and the crew estimate that he was recovered, unconscious, back on board the vessel after 30-40 minutes in the water. Despite their best efforts, the crew were not able to resuscitate him.

The net shooting ports

The net shooting ports were introduced when *Enterprise* was converted from a beam trawler to a twin rigged stern trawler in 2006. Other similar conversions completed by Kynde & Toft had been fitted with temporary closing arrangements so as to make them safe when not in use. However, the shooting ports of *Enterprise* did not include any closing arrangements and so presented a hazardous working area for the crew that did not comply with the legal requirement to provide a continuous barrier around the shooting deck.

LR's approval of the design, and subsequent survey following the conversion, were completed from the perspective of structural strength. It was the MCA's responsibility to survey the vessel against the regulatory requirements pertaining to crew safety. However, the design of the shooting ports was not challenged by the MCA at any stage.

It is unfortunate that the unsafe and non-compliant nature of the shooting ports was not identified at the vessel's first survey following its conversion in 2006. However, given the clear and obvious nature of the shooting ports, and the other similar vessels based in Harlingen, it is possible that at subsequent biennial surveys, the attending surveyors wrongly assumed that the ports had previously either been found compliant with the regulations or were subject to an exemption.

Risk perception

The owners of *Enterprise* were of the firm opinion that the shooting ports needed to be flush with the poop deck to avoid the need to manually handle the net, which would increase the risk of falling overboard. Although the risk of falling overboard while working on the deck of the vessel had been identified as high, there was no mention in the risk assessment document of the open shooting ports which represented the most obvious danger.

The poop deck area aft of the net drums, where the crew were repairing the nets, was the most exposed and dangerous working area on board *Enterprise*, especially in rough seas such as those experienced on the day of the accident. The area immediately forward of the drums was slightly smaller than the area aft of the drums. However, it did offer sufficient space in which to carry out net repairs, and the drums would have provided a barrier against falling overboard through the ports. The vessel also had a large and well protected main deck area (**Figure 2**) that could also have been used for this purpose.

By choosing to repair the nets on the shooting deck, the skipper and crew demonstrated a very low level of awareness about the clear risk posed by the adjacent open shooting ports. However, they had repaired nets in the same location without incident on many occasions, regardless of the weather conditions, and it is likely that their appreciation of the risk had therefore diminished over time.

Skipper's actions

It is not possible to know what the skipper's intentions were when he left *Enterprise*'s wheelhouse and went aft to where the crew were repairing the nets. It seems unlikely that he had intended to get involved in the work, as he had not changed into oilskins or donned a lifejacket in accordance with his own requirements. However, he was aware that some of his crew were inexperienced, and it is possible he went aft to oversee the repair of the nets to ensure that the work was completed quickly so that the vessel could return to fishing as soon as possible. Once present, it is apparent that he was not satisfied with the progress of the repair and, wanting to expedite it, decided to become directly involved.

Before getting involved with the repair, the skipper did not first change into appropriate clothing and footwear or don a lifejacket. He then stood on the slippery net in close proximity to the shooting port and was taken unawares by the violent movement of the vessel, which caused him to fall overboard.

In common with the rest of the company and the crew, it is apparent that the skipper had become complacent about the dangers of working in the vicinity of the shooting ports. Safe working procedures, including the wearing of appropriate clothing, footwear and lifejackets were not adhered to and, sadly, the skipper's decisions in this regard were not challenged by his crew.

Response to crisis

The crew acted quickly to try and rescue the skipper from the water. Immediately after he fell overboard, the skipper shouted the instruction to bring *Enterprise* astern as he was aware that it was moving away from him. Given the unexpected nature of the situation, it is understandable that the crew did not stop to discuss how best to deal with the emergency. However, despite there being a designated second-skipper on board, it was the nominated engineer who took charge of the operation and went to the wheelhouse to manoeuvre the vessel back towards the skipper.

The second-skipper was a competent navigator who, had he taken charge of the manoeuvring, was more likely to have positioned the vessel such that the casualty was in its lee, thereby facilitating the rescue operation. The loss or incapacitation of the skipper was a scenario that neither the crew nor the company had anticipated. Therefore, it was not included in the risk assessment and no procedures to assist with this eventuality had been developed or drilled.

Manoverboard rescue

Despite the lack of co-ordination that resulted from the loss of the skipper, the crew were able to throw a lifebuoy to the casualty, deploy the Markus net and lower the pilot ladder. The value of having the cook enter the water to assist the skipper at a time when he was capable of helping himself, is debatable, but the action might have been a perceived lesson learned from the reportedly successful manoverboard rescue on *Annegina*.

The skipper was able to grasp the line from the Markus net and use it to reach the pilot ladder. Understandably, he then chose to let go of the line in an attempt to climb the ladder. However, having been immersed in the cold water (13.6°C) for some minutes, it would not be surprising if he was no longer physically capable of supporting himself, and he lost his grip as the sea fell away from under him. The subsequent failed attempt to lift him using the grab line of the lifebuoy is a clear indication that the crew were becoming increasingly desperate. This accident demonstrates the challenges of rescuing a man overboard casualty, especially in heavy seas. While it would be potentially dangerous to carry out manoverboard drills in rough weather, increased familiarity with the Markus net and a knowledge of the physical incapacitation resulting from immersion in cold water would have enabled the crew to have developed, and drilled, a more appropriate manoverboard procedure. Such a procedure should not rely on the casualty being capable of helping themselves or making appropriate decisions.

Distress alert

A "Mayday" was only transmitted once the crew realised that their efforts to revive the skipper were not succeeding. While the crew were undoubtedly occupied by their attempts to recover the skipper, it is quite possible that transmission of the "Mayday" was delayed in the hope that they would be successful. Had they been successful, it is also possible that this accident, like the man overboard from *Annegina*, 3 weeks earlier, would not have been reported. Whatever their motivation, by not transmitting a "Mayday" at the earliest opportunity the crew delayed the provision of external assistance.

The accident occurred approximately 114nm from the closest land, well beyond the range of VHF radio transmissions. However, the nominated engineer chose to transmit the distress call using the VHF radio, rather than the satellite enabled Digital Selective Calling (DSC) that was also available; a decision that he did not question even when he received no response from the coastguard. This demonstrates a lack of competence in radio communication and reinforces the need for the risks associated with the incapacitation of a specialist crew member, such as the skipper, to be assessed and suitable procedures developed and drilled. If the second skipper had taken command of the vessel following the skipper going overboard it is likely that, as a suitably qualified deck officer, he would have identified the need to transmit the "Mayday" by all available means.

At the time of the accident no dedicated rescue assets were within the immediate vicinity of *Enterprise*. Therefore, even if the "Mayday" had been transmitted via the DSC, no timely assistance would have been available to the crew. However, the crew did not know this and, in other circumstances, using the DSC could have saved the skipper's life. It is imperative that distress alerts be transmitted using all available means during the early stages of an emergency.

CONCLUSIONS

- *Enterprise*'s shooting ports did not include any closing arrangements and presented a hazardous working area for the crew that did not comply with the bulwark height requirements.
- The unsafe nature of the shooting ports had not been recognised by the vessel's owner, the MCA or the crew although the risk of falling overboard while working on deck had been considered in the vessel's risk assessment.
- The skipper did not don a lifejacket or change into appropriate clothing and footwear before working on deck.
- The loss or incapacitation of the skipper had not been anticipated and no procedures to assist with this eventuality had been developed.
- Increased familiarity with the Markus net and a knowledge of the physical incapacitation that results from immersion in cold water would have enabled the crew to develop, and drill, an appropriate manoverboard procedure.
- A "Mayday" was not transmitted until approximately 40 minutes after the skipper fell overboard, and that call was only made using VHF when the satellite enabled DSC would have been more appropriate given the vessel's location.

ACTION TAKEN

MAIB actions

The **Marine Accident Investigation Branch** has published a safety flyer to disseminate the key lessons of this accident within the fishing industry.

Actions taken by other organisations

The Maritime and Coastguard Agency has:

Recognised that unguarded openings on deck, irrespective of their function, should not be permitted. Guidance in this matter, for fishing vessel surveyors, has been introduced in the Merchant Shipping Instructions to Surveyors (MSIS 27), which states:

On vessels with working/operational areas where the transom has open areas in the bulwarks for fishing operations, there should be fitted a gate or taut wires ... of the same height as the bulwarks or adjacent structure, to protect the crew from the risks of falling overboard. This gate or other device ... should be open only for shooting or hauling the nets. Lifelines should be available for use when the area has been opened for fishing operations.

In addition the vessel's Risk Assessment should include an assessment and mitigation strategy to ensure the risk is acceptable. If this cannot be achieved measures will need to be put in place such as ... restricting the access to the area..."

The MCA is also conducting a targeted campaign to identify all UK flag fishing vessels that do not comply with the minimum bulwark height and require closing arrangements to be fitted if feasible or, where not feasible, restrict access to such areas.

RECOMMENDATIONS

The Maritime and Coastguard Agency is recommended to:

2016/126 Take steps to ensure that fv *Enterprise* complies with the minimum bulwark height requirements of the Torremolinos International Convention for the Safety of Fishing Vessels as referred to in Council Directive 97/70/EC and in accordance with the revised requirements contained in MSIS 27.

Ekofish Group is recommended to:

- **2016/127** Review the risk assessments for all vessels under its management to ensure that they properly consider the risks of falling overboard and the loss or incapacitation of the skipper while at sea.
- **2016/128** Establish procedures to ensure compliance with the statutory reporting requirements stipulated in the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, as amended.

Safety recommendations shall in no case create a presumption of blame or liability

SHIP PARTICULARS

Enterprise
UK
Lloyd's Register
9080390
Stern trawler
Osprey (PD147) Limited
Ekofish Group, The Netherlands
Danbrit Shipmanagement Ltd
Steel
1995
44.94m
39.65m
748
Fish

Port of departure	Harlingen
Port of arrival	Harlingen
Type of voyage	Short International
Cargo information	Fish
Manning	Authorised - 6; actual - 8

MARINE CASUALTY INFORMATION

Date and time	9 July 2015, approximate time 0415
Type of marine casualty or incident	Very Serious Marine Casualty
Location of incident	North-east of Dogger Bank, North Sea
Place on board	Starboard fishing net
Injuries/fatalities	1 fatality
Damage/environmental impact	None
Ship operation	Fishing
Voyage segment	Mid-water
External & internal environment	North-westerly cyclonic, gale force 6 to 8 (gusting 35kts), rough seas (2.6m to 4m), dry, twilight/daylight, seawater temperature 13.6°C
Persons on board	9