



Bundesstelle für Seeunfalluntersuchung
Federal Bureau of Maritime Casualty Investigation
Federal Higher Authority subordinated to the Ministry of Transport
and Digital Infrastructure

Investigation Report 203/15

Very Serious Marine Casualty

Fatal accident
on board the FV ORTEGAL TRES
on 27 May 2015 off the Shetland Islands

20 May 2016

The investigation was conducted in conformity with the Law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Law – SUG) of 16 June 2002, amended most recently by Article 1 of 22 November 2011, BGBl. (Federal Law Gazette) I p. 2279.

According to said Law, the sole objective of this investigation is to prevent future accidents and malfunctions. This investigation does not serve to ascertain fault, liability or claims (Article 9(2) SUG).

This report should not be used in court proceedings or proceedings of the Maritime Board. Reference is made to Article 34(4) SUG.

The German text shall prevail in the interpretation of this investigation report.

Issued by:
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1 Summary

At about 2130¹ on 27 May 2015, smoke was seen on board the fishing vessel ORTEGAL TRES coming out of the cabin on the starboard side during a fishing voyage on the high seas off the Shetland Islands. Upon opening the door, a fire was discovered there. It was possible to extinguish this immediately using two fire extinguishers. A 21-year-old seaman was found lifeless in the berth in the cabin. Immediately initiated attempts at resuscitation were unsuccessful.

¹ All times shown in this report are local (UTC - 1 h)

2 FACTUAL INFORMATION

2.1 Photo



Figure 1: Photo of the ship

2.2 Ship particulars

| | |
|-------------------------|--|
| Name of ship: | ORTEGAL TRES |
| Type of ship: | Fishing vessel |
| Nationality/Flag: | Germany |
| Port of registry: | Hamburg |
| IMO number: | 7424580 |
| Call sign: | DFQG |
| Fisheries code: | HF 570 |
| Owner: | Ortegal Fischerei GmbH. Manager: Pesclemar, Spain |
| Year built: | 1975 |
| Shipyard/Yard number: | Julius Diedrich, Oldersum, new build 130 |
| Classification society: | Germanischer Lloyd |
| Length overall: | 32.39 m |
| Breadth overall: | 7.22 m |
| Gross tonnage: | 265 |
| Deadweight: | 116 t |
| Draught (max.): | 3.32 m |
| Engine rating: | 150 kW |
| Hull material: | Steel |
| Minimum safe manning: | 6 |

2.3 Voyage particulars

| | |
|-----------------------|---|
| Port of departure: | La Coruña, Spain |
| Port of call: | Ullapool, Scotland |
| Type of voyage: | Merchant shipping/ fishing (international) |
| Cargo information: | Fish |
| Manning: | 17 |
| Pilot on board: | No |
| Number of passengers: | None |

2.4 Marine casualty or incident information

| | |
|---|---|
| Type of marine casualty or incident: | Very serious marine casualty; one seaman lost his life |
| Date, time: | 27/05/2015 at about 2130 |
| Location: | North Atlantic, Shetland Islands |
| Latitude/Longitude: | ϕ 60° 14'N λ 003° 46.0'W |
| Ship operation and voyage segment: | At sea |
| Place on board: | Superstructure (in the cabin) |
| Human factors: | Yes, violation |
| Consequences (for people, vessel, cargo, environment, other): | One seaman lost his life |

Excerpt from Nautical Chart BA 2 – British Isles

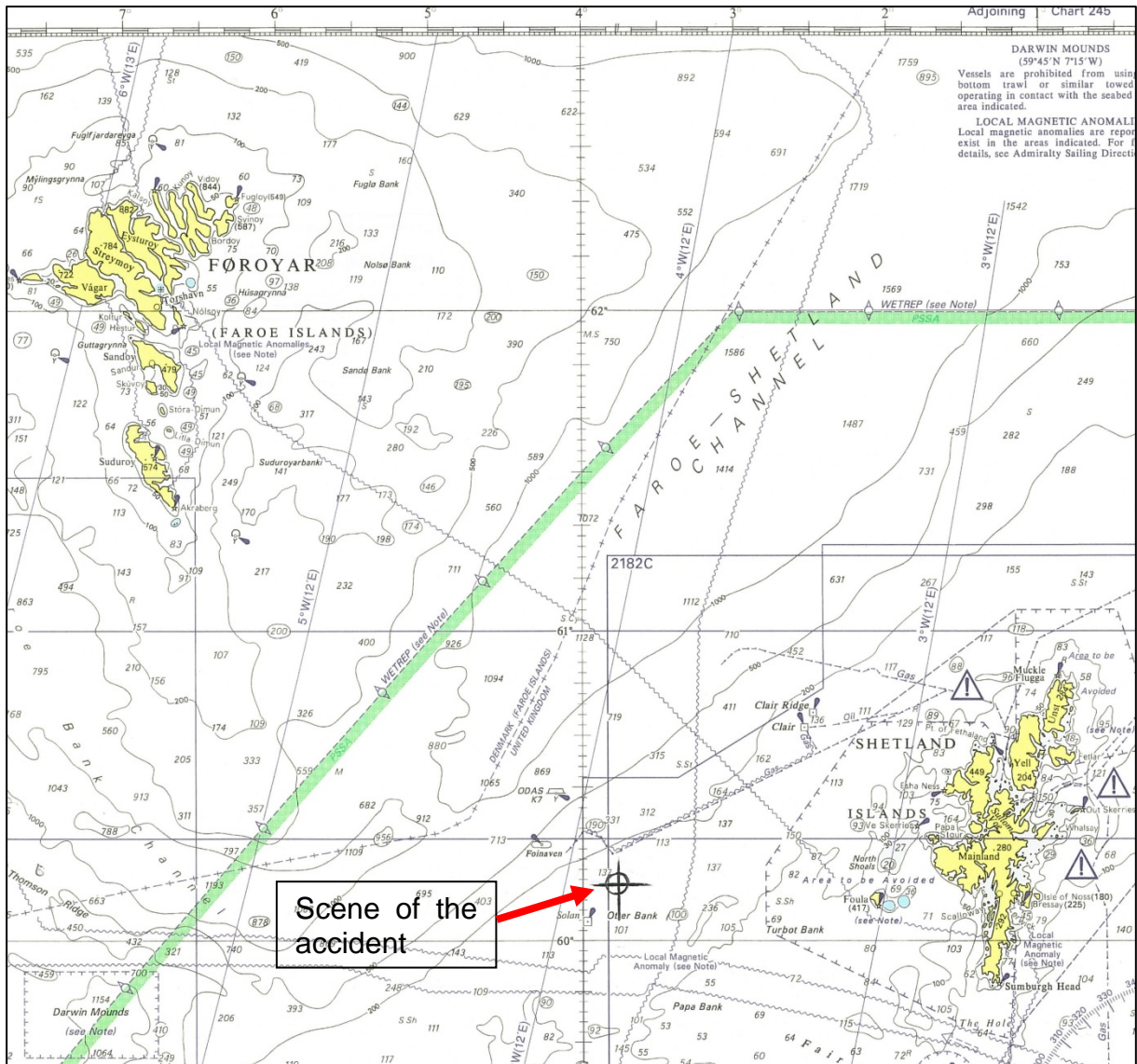


Figure 2: Nautical chart

2.5 Shore authority involvement and emergency response

| | |
|--------------------|---|
| Agencies involved: | MCA, Scotland Yard |
| Resources used: | |
| Actions taken: | First aid, cardiopulmonary massage, attempts at resuscitation |
| Results achieved: | Person deceased |

3 COURSE OF THE ACCIDENT AND INVESTIGATION

3.1 Course of the accident

On 27 May 2015, the fishing vessel ORTEGA TRES was on a fishing voyage west of the Shetland Islands with 17 crew members on board. The chief officer and chief engineer were on the bridge. The master was stood down in his cabin. Two crew members were on the port side opposite the casualty's cabin and three crew members on the lowest deck aft in the cabins. The casualty was last seen at supper at about 2030. He then stayed in the cabin on the starboard side (frames 26-32). Eight crew members were occupied with processing fish in the forward fish processing area (in front of frame 32) when smoke from the cabins was noticed billowing out of a ventilation fan at about 2130. The master was immediately awakened and the chief officer and chief engineer went up to the front of the cabin, from which heavy smoke was billowing, on the starboard side without respiratory protection. The cabin ventilation was switched off. One of the able-bodied seamen, who was on the port side in the cabin, went to assist and the door was open carefully. The able-bodied seaman threw a damp blanket onto the evident seat of the fire and subsequently pulled the crew member lying in the lower berth out of the cabin. The seat of the fire was extinguished using two fire extinguishers about five to ten minutes after the smoke was noticed. At the same time, the casualty was taken forward via the starboard passageway and the chief officer started attempts at resuscitation. The attempts were unsuccessful and discontinued after about five minutes.

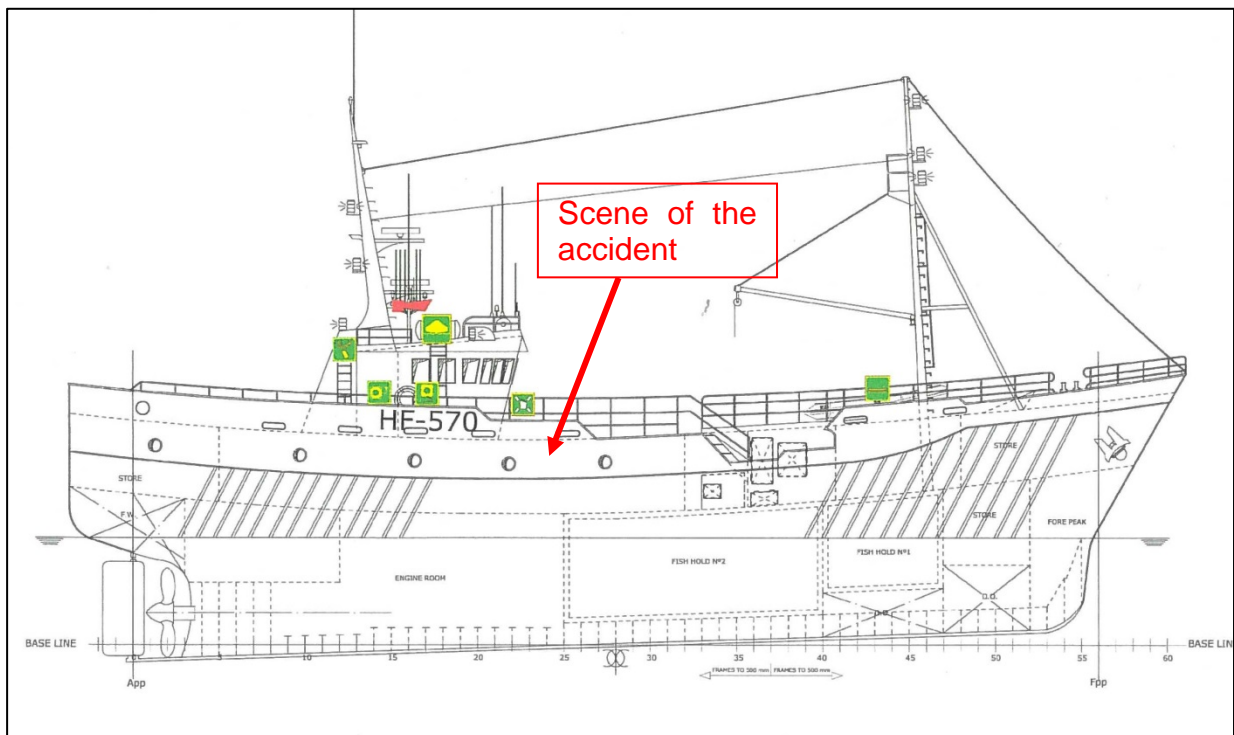


Figure 3: Extract from the general arrangement plan (side view)



Figure 4: Extract from the general arrangement plan (top view)

3.2 Investigation

The British Marine Accident Investigation Branch (MAIB) informed the Federal Bureau of Maritime Casualty Investigation about the accident at about 1430 (local time) on 29 May 2015. The owner did not report the accident to the BSU or to the Ship Safety Division (BG Verkehr). It was not possible to make contact via the registered address of Ortegal Fischerei GmbH in Hamburg. Information could only be obtained on 1 June 2015 through the owner's legal counsel. By this time, the ship had already been moored in Ullapool, Scotland, since 29 May 2015. Officials from the MCA² and Scotland Yard were on board for the investigation, while the entire crew – with the exception of the chief engineer – was accommodated in a hotel for three days. For reasons of capacity and time, the BSU dispensed with carrying out an investigation on board immediately.

The ORTEGAL TRES continued the fishing voyage after the police in Ullapool released the ship and only finished it on 4 July in La Coruña, Spain, where the investigation team from the BSU surveyed her on 11 August 2015.

² MCA: Maritime & Coastguard Agency

4 ANALYSIS

The following analysis deals with the circumstances that led to the accident and action taken to prevent such accidents in the future.

4.1 Weather report

The Maritime Division of Germany's National Meteorological Service (DWD) was requested to prepare an official report on the weather and sea conditions in the sea area west of the Shetland Islands for the period of the accident.

Weather situation

On 27 May 2015, an extensive storm front (998 hPa) was situated south-east of Iceland. This moved slowly on an easterly track while deepening somewhat in the process. At the same time, a secondary depression was evident by the Hebrides with core pressure of 1008 hPa. This had reached southern Norway by midnight. Rain accompanied the associated fringes and crossed the region; humidity stood at between 90 and 100%.

Wind

The current was not turbulent and there were no gusts due to the stable air stratification. A force 5 Bft south to south-west wind prevailed.

Significant sea state

The sea state stood at 3 m with a period of 10 s and was influenced predominantly by the level of swell. Here, a significant wind sea did not materialise.

Temperature

Water temperatures stood at 9-10°C; the air temperature at a height of 2 m above the water surface stood at 7°C.

4.2 Course of the accident according to the witness testimony

The 17-man crew consisted of Spanish, Portuguese, and Indonesian seamen. The casualty was an Indonesian national and had been on board the ORTEGAL TRES since 2 January 2015. It was his first voyage under this owner. He was last seen at supper at about 2030. Occupied by four seamen, the casualty's cabin is on the starboard side (from frames 26-32). He was stood down and alone in the cabin, while the other three roommates were working on the fish processing deck.

During the evacuation of the casualty and the extinguishing work, the witnesses noticed a strong smell of burning rubber. The fire broke out in the cabin and was evidently caused by an electric household fan on which the casualty had probably dried his rainwear and rubber boots.



Figure 5: Cabin door



Figure 6: Casualty's berth

4.3 Cause of death

The body was examined at Raigmore Hospital's department of forensic medicine in Inverness on 4 June 2015. It was found that the cause of death was carbon monoxide poisoning as a result of a fire on board.

4.4 Investigations on board

The ORTEGAL TRES was surveyed in La Coruña, Spain, by the Ship Safety Division (BG Verkehr) on 29 July and by the BSU on 11 August 2015.

As a result of the flag State inspection by the Ship Safety Division (BG Verkehr), a prohibition to leave port was issued because the investigation revealed that the entire installation of the electrical cable connections and wiring in the accommodation and work area was in an unacceptable condition. The extractor hood in the galley was filthy and unacceptable in respect of fire safety. All in all, the general condition of the ship was so poor that it appeared that the safety of the ship, the crew, and the environment was not guaranteed if she set sail.



Figure 7: Socket in the cabin



Figure 8: Additional wiring



Figure 9: Socket strip on the bridge



Figure 10: Plug on the main deck

For the normal, permanently installed heating, oil-fired electric radiators powered by 230 V alternating current are mounted on the walls. The fan heater that evidently

caused the accident was reportedly taken on board by the crew. It was reportedly a normal household fan heater that operates by means of a fan and heating elements. According to information given by the owner, the British authorities seized this fan heater in Ullapool. However, the BSU was not able to determine which authority took the fan heater off the vessel or its whereabouts.

5 CONCLUSIONS

5.1 Analysis of the accident

The fatal accident is due to the development of a smouldering fire on a fan heater. This fan heater was taken on board without the knowledge of the ship's command. Clothing or rubber boots hung above the fan heater to dry caught fire.

5.2 Measures taken after the accident

The owner replaced most of the electrical system in the cabins, which are to be inspected on a weekly basis in the future so as to prevent possibly unauthorised modifications to the cables or the installation of unauthorised electrical appliances.

5.3 Findings

In all likelihood, the accident happened without the involvement of another person.

The publication of safety recommendations has been dispensed with.

6 SOURCES

- Enquiries of the BSU
- Written statements
 - Ship's command
 - Owner
- Witness testimony
- Official weather report by Germany's National Meteorological Service (DWD)
- Documentation from the Ship Safety Division (BG Verkehr)
 - Accident Prevention Regulations (UVV See)
 - Guidelines and codes of practice
 - Ship files