



**REPORT into
A FIRE
ON BOARD
THE MFV "DERISA"
OFF HOOK HEAD,
CO. WEXFORD
ON 06 JANUARY, 1997**

The Marine Casualty Investigation Board was established on the 5th, June 2002 under The Merchant Shipping (Investigation of Marine Casualties) Act 2000

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SYNOPSIS

1. SYNOPSIS.

On 6 January, 1997 the MFV "Derisa" went on fire approximately 1.5 miles south of Hook Head. Although the fire was extinguished, the vessel was badly damaged and eventually towed to Youghal Bay. No injuries were sustained and there was no loss of life as a result of this incident.

2. FACTUAL INFORMATION

Description of the MFV "DERISA"

2.1	Owner	Mr. Diarmuid O'Donovan Mediterranean House Castletownbere Co. Cork
	Construction	Wooden construction with aluminium open shelter deck
	Official Number:	402077
	GRT:	102.4 tons
	Fishing Number:	S67
	Registered Length:	19.81 meters
	Year of Build:	1980
	Crew at time of casualty:	5
	Position at time of fire:	1.5 miles South of Hook Head

EVENTS PRIOR

3. EVENTS PRIOR TO THE INCIDENT

- 3.1 On the 6th January, 1997 the fishing vessel "Derisa" left Dunmore East Harbour shortly after 13.00 hrs. and headed for fishing grounds which are some 3 to 4 miles south of Dunmore East.
- 3.2 The vessel had travelled approximately 1.5 miles south of Hook Head when an audible Main Engine alarm sounded in the wheelhouse. This alarm system is only for engine/gearbox temperature and pressure faults and is not designed to detect or to indicate the presence of a fire.
- 3.3 When the alarm sounded the Skipper, Mr. Diarmuid O'Donovan, instructed, 'the lookout' Mr. Donal O'Neill, to call the Engineer, Mr. Tadgh Crowley, so that the cause of the alarm could be investigated. At the same time the Skipper reduced the engine speed and disengaged the gearbox. He tried to bring the propeller pitch to neutral but was unable to do this because the control lever was jammed.

4. THE INCIDENT

- 4.1 The Engineer and a deck hand, Mr. Patrick Harrington, were resting in their bunks in the crew accommodation at this time. The Engineer had heard the alarm and was in the process of getting dressed when he was called by the Bridge lookout. At the same time the lookout smelled smoke and could see smoke appearing from around the frame of the closed door, which was at the forward end of the galley/mess room. He mentioned this to the Engineer and he also opened the door to investigate the cause but a large volume of smoke drove him back and he closed the door again. Another crewmember, Mr Gary Feeley, was asleep on the seating in the mess room.
- 4.2 The Engineer proceeded up the stairs from the crew accommodation into the galley/mess room to investigate the cause of the smoke. He opened the door leading down from the galley/mess room to the lobby above the engine room and was met with dense smoke billowing up from below. He shut the door immediately. The fire appeared to be rapidly taking hold and spreading upwards.
- 4.3 All crewmembers made their way to the top of the shelter deck as ordered by the Skipper. At this stage the smoke had become so dense the Skipper could not enter the wheelhouse but he reached inside for the microphone of the VHF radio, which he knew, was set at Channel 6. He put out a May Day call and asked his fishing partner the "Princess Grainne" to come to his assistance.
- 4.4 The Skipper ordered that the inflatable life raft be carried from its cradle at the wheelhouse to the bow of the vessel where it was launched successfully.
- 4.5 The "Princess Grainne", skippered by Mr. Michael Murphy, was in close proximity to the "Derisa" and responded to the May Day call issued and he also relayed the call on Channel 16 and this in turn was intercepted by the Naval Vessel "L.E. Orla" which was operating in the area.
- 4.6 At 14.41 hrs. the "L.E. Orla" and the Dunmore East Lifeboat were tasked to attend. The "L.E. Orla" proceeded towards "Derisa" to give assistance and arrived alongside at 15.10 hrs
- 4.7 The "Princess Grainne" was brought alongside the forward end of the "Derisa" and all on board were able to jump to safety on to the "Princess Grainne". The inflatable life raft was not used in the rescue but would have been ready if required.
- 4.8 The fire fighting team from the "L.E. Orla" extinguished the fire at 15.15 hrs. but it re-started at 15.21 hrs. It was subsequently reported to be extinguished at 16.43 hrs. The "Derisa" was reported to be badly burned out.
- 4.9 The Skipper estimated that between the sounding of the engine alarm and the launching of the life raft that no more than five minutes had elapsed and that there was not enough time to use any of the vessel's fire fighting equipment to fight the fire.

EVENTS FOLLOWING

5. EVENTS FOLLOWING INCIDENT

- 5.1 The stricken vessel was towed by the "Princess Grainne" to Youghal Bay where it was met by the tug "Buffel" from Cobh. The tow was taken over by the "Buffel" and the "Derisa" was safely towed to Cobh where it was inspected and the incident investigated.

6. CONCLUSIONS AND FINDINGS

- 6.1 It would appear that the fire might have started in an electrical panel contained inside a steel cabinet, which was mounted over the main engine. This panel was the main engine/gear box protection alarm panel, which gave an audible alarm in the wheelhouse in the event of a malfunction in the engine or gearbox. It was not designed to detect a fire or give an alarm in the event of a fire occurring.
- 6.2 An electrical fault probably occurred within the panel, which gave rise to a short circuit and consequent heat. The insulation material would have taken fire and may have caused further short circuits. It is probably due to such short-circuiting that the alarm sounded in the wheelhouse, alerting the Skipper that something was wrong. The Skipper assumed that it was an engine fault.
- 6.3 The layout of the vessel is such that the wheelhouse is the uppermost part of the vessel. Below the wheel house and aft of it is situated the galley/mess room. Below the galley/mess room is the engine room. Aft of the engine room and separated by a bulkhead is the crew accommodation. Access to the crew accommodation is down from the end of the galley/mess by means of a set of steps. At the forward end of the galley/mess is a wooden door which is normally closed and this doorway leads downwards to a small lobby which is directly under the wheel house and this lobby has a door which leads down to the engine room. The engine room door was normally kept in the open position. The lobby has a large hinged steel hatch on the starboard side which leads out into the shelter deck. This hatch was normally kept in the open position.
- 6.4 It is understood that the reason for keeping the lobby hatch and the engine room door in the open position was to ventilate the lobby. Electric fans also ventilated the engine room. The fact that the door and hatch were open, greatly contributed to the rapid spread of the fire, as they would have ensured a plentiful supply of air. There would have been a funnelling effect also and this could be seen where the fire spread out through the steel hatch to the shelter deck burning its way forward causing the overhead hydraulic flexible hoses to take fire. This literally added oil to the fire and spread it even more rapidly and intensely. The temperature and heat subsequently rose to a sufficient degree so as to cause the aluminium shelter deck to melt and collapse.
- 6.5 If the engine room door and the steel hatch leading out on to the shelter deck had been kept closed the fire would almost certainly not have spread with such rapidity and could have been confined to the engine room. The engine room was protected by a carbon dioxide gas flooding fire extinguishing system and this could have been used to extinguish the fire once all other openings and vents has been closed. Because of the speed with which the fire spread it was not possible to control it and the crew were lucky to escape with their lives.

RECOMMENDATIONS

7. RECOMMENDATIONS

- 7.1 It is recommended that the number of openings to machinery spaces be kept to a minimum as is appropriate to the effective working of fishing vessels. Such openings should be capable of rapid closure in the event of a fire.
- 7.2 It is recommended that a Marine Notice be issued to bring to the attention of Skippers and owners of fishing vessels in particular that the prevention of a serious fire is possible if the necessary precautions are taken to close down openings to machinery spaces.

8. Appendices

8.1 Photographs of the “Derisa” damaged by fire

APPENDIX 8.1

Top: Shelter Deck Fire Damage

Bottom: Shelter Deck Fire Damage



Top: Wash Hand Basin In Lobby
Bottom: Engine Room Looking Forward



APPENDIX 8.1

CONTD.

Top: Electrical Box where fire started

Bottom: Electrical Box where fire started



Top: Top of Handrobes in Crew Accommodation
Bottom: Steps up from Lobby to Galley Mess



APPENDIX 8.1

CONTD.

Top: Wheelhouse Front

Bottom: Collapsed Shelter Deck



Top: Collapsed Shelter Deck and hydraulic oil hoses charred net bins.
Bottom: Remains of Lifebuoy situated at forward end of Shelter Deck.



APPENDIX 8.1

CONTD.

Top: Looking forward on starboard side of Shelter Deck

Bottom: Looking through open hatch from Shelter Deck into Lobby.



Top: Looking through collapsed Shelter Deck (from above).
Bottom: Galley Mess.

