

## SYNOPSIS

At 0045 on 6 June 2006, a deckhand on board the UK-registered scallop dredger *Danielle* became trapped by a rope that was being used on a winch whipping drum. He sustained serious arm and chest injuries and was evacuated by RNLI lifeboat and ambulance to hospital, where subsequently his arm had to be amputated.

The deckhand had been “tipping” each scallop dredge individually, using several turns of rope around the whipping drum on the port side of the winch house, when a riding turn developed. In an attempt to stop the winch and clear the riding turn, the deckhand slipped on the recovered dredging gear lying on the deck. His left hand became caught in the rope between the winch head and the framework beneath, and he subsequently did two backwards somersaults round the whipping drum and framework. On both occasions he was unable to reach the stop due to this framework, and it was only once his left arm had broken and shoulder dislocated, that he was able to stop the winch and avoid being dragged round it a third time.

The deckhand was freed from the whipping drum and helped into the galley. He had lost several fingers, and fractured and severed his upper left arm. His t-shirt had been forced into the wound, and was helping to stem the blood flow, and he also had red chest rashes, an indicator of his nine fractured left ribs and punctured left lung.

The skipper contacted the Maritime Rescue Co-ordination Centre (MRCC) at 0054 to report the accident, stating that they were 16.2 miles SSE of Falmouth, and steaming in at top speed.

A link call between the skipper and a radio medical advice doctor in Portsmouth was facilitated by the MRCC. During this conversation, the skipper provided a detailed description of the injuries, including the chest rashes, but on several occasions the doctor tried to interrupt for clarification, and might not have heard all the details.

The MRCC and the doctor subsequently agreed that the deckhand required evacuation to hospital and that this would most appropriately be carried out by the Falmouth lifeboat, with their volunteer Lifeboat Medical Advisor on board. The possibility of using a helicopter from the nearby Royal Naval Air Station Culdrose was discounted, due to the 45 minute airborne night response time.

At 0107, *Danielle*'s skipper provided an update to the MRCC, reporting that the deckhand was experiencing breathing difficulties, and had a semi-severed arm, with a possible neck/spinal injury. These details were passed onto the doctor at 0113, but it was agreed that the lifeboat was still the best option for providing assistance.

The deckhand was subsequently evacuated by the lifeboat, with a land ambulance completing the transfer to Truro hospital, where he arrived at 0334, 2 hours and 40 minutes after the initial VHF call.

Various issues regarding this evacuation have been identified, including:

- Ambulance Control did not obtain the full medical details available to properly prioritise the initial ambulance response. This led to the original ambulance being diverted to a “higher” priority patient and a delay awaiting a further ambulance.

- The MRCC had previously not been made aware of:
  - the RNLI's policy of using cruising speeds, which led to the lifeboat deploying to the accident at a reduced speed (20.5 knots), in accordance with an RNLI-wide circular reserving top speed (25 knots) only for life-threatening incidents;
  - the new ambulance prioritisation system used by Ambulance Control.

The actual evacuation time could have been reduced by 30 minutes if there had been no lifeboat or ambulance delays. It is estimated that if a helicopter had evacuated the casualty to hospital, this could still have been quicker than if the lifeboat had deployed at full speed and the ambulance had not been delayed.

The delay is, however, unlikely to have made any difference to the outcome of the accident or the viability of the casualty's arm, due to the severity of the injuries sustained, other than reducing the deckhand's prolonged extreme suffering.

Closer co-operation is required between the various SAR providers to ensure that each is fully aware of the others' capabilities and that important information, especially medical details, are accurately conveyed.

The accident would have probably been prevented if a risk assessment had recognised the hazards associated with the dredge tipping operation, and had appropriate control measures been adopted to improve the working environment before the accident. It is normal practice for the experienced deckhands to "tip" alone, and this is considered undesirable and dangerous, given the current "tipping" arrangement on board the vessel.

Recommendations have been made to Mermaid Trawler Company Ltd, the MCA and Seafish regarding the framework and emergency stop facilities in the vicinity of the whipping drums; the promulgation of the hazards associated with "tipping"; the recording of details of risk assessments on statutory documentation; and the provision of practical on board guidance in completing risk assessments.