MARINE OCCURRENCE REPORT

LOSS OF LIFE

ON BOARD "RYAN ROYALE"
AT SEA
24 AUGUST 1994

REPORT NUMBER M94M0037

The Transportation Safety Board of Canada (TSB) investigated this occurrence for the purpose of advancing transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability.

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Summary

The fishing vessel "RYAN ROYALE", rigged for scallop harvesting, was hauling back her gear when, at approximately 1730, 24 August 1994, one of the deckhands was crushed between the incoming wire rope and the winch barrel, having been dragged in by his left foot and leg as the barrel rotated. He died before the vessel reached Meteghan, Nova Scotia, at approximately 1853. The winch controls were unattended at the time of the incident. Weather conditions were fine, with light airs, calm sea and unrestricted visibility.

All times are expressed in Atlantic Daylight Time (Coordinated Universal Time minus three hours).

Other Factual Information

Port of Registry	Digby
Flag	Canadian
Official Number	803118
Type	Fishing and/or scalloping
Gross Tons	54
Length	17 m
Built	1984, Parkers Cove, N.S.
Propulsion	Cummins 365
Owner/Operator	E.C. Oliver Granville Ferry, N.S.

A new wire rope of 1.6 cm in diameter had been bent onto the scallop rake approximately two weeks before the accident. This was approximately 503 m (275 fathoms) in length and marked at 183 m (100 fathoms) from the bitter end.

When harvesting, with more than 183 m (100 fathoms) of wire deployed, it is necessary to manually guide the wire onto the barrel of the winch to prevent a build up of riding turns.

This winch, located on the starboard side of the afterdeck, is fed by the incoming wire from a single roller fairlead situated further aft and guided onto the winch by a deck hand who would normally stand to starboard of the wire, while performing that function.

A round steel bar, stepped in one of the 8 holes in the winch bed plate, is used to guide the incoming wire in even layers onto the barrel of the winch, until the last 183 m (100 fathoms) is reached. Thereafter, the guide bar is not used as the wire tends to become self stowing, at which time that particular deck hand returns to the winch control via the shucking house.

For ease of handling and to ensure the guide bar does not become caught in the winch, a square steel section bracket had been fitted. This type of fitting is common on similarly rigged vessels.

On 24 August 1994, there had been no rain, the weather was fine, the deck area abaft the winch was dry and the vessel was not rolling or pitching as the sea was calm. There were no snags on the wire and the deceased had been wearing good quality new or nearly new boots, trousers, etc., which were without tears or loose threads.

Prior to the vessel's departure from Meteghan, N.S. on 22 August 1994, the deceased was well rested and although the work on such a vessel is arduous the crew was maintaining a recognised pattern of labour/time below. The deceased had been engaged in the fishing and/or scalloping trade for approximately 8½ years on this vessel.

Although "RYAN ROYALE" is an inspected vessel and possesses a valid Inspection Certificate (SIC 29) issued by Canadian Coast Guard, which

encompasses life saving equipment, none of the scallop harvesting gear is subject to inspection by that authority.

Where there is an employer/employee relationship on a ship, various Regulations apply including the Safe Working Practices Regulations. However, on "RYAN ROYALE", the skipper and crew are considered to be joint ventures, as each participates in prearranged shares of the catch and are, therefore, beyond the scope of any such Regulation.

On 24 August 1994, while hauling back the scallop rake, the skipper was either in the wheel-house or on the starboard side of the deck adjacent to it; one deck hand was in the cuddy resting and one deck hand was in the port side shucking house. The deceased had been guiding the incoming wire onto the winch barrel. On ceasing that operation and in stepping over the incoming wire to return to the winch controls, he became ensnared between the wire and the turns already on the winch barrel.

At 1730, Halifax Rescue Co-ordination Centre (RCC) was notified by Yarmouth Coast Guard Radio Station (VAU) that "RYAN ROYALE", in position 44°06'18"N, 66°25'42"W, approximately 14 miles from Meteghan, had on board an injured and unconscious man. RCC responded by advising "RYAN ROYALE" to proceed towards Meteghan, the closest accessible port, and tasked an already airborne Canadian Armed Forces helicopter (R302) which was engaged in another exercise. However, for that particular exercise no SARTECH had been embarked and therefore it was necessary for the helicopter to return to its base at Greenwood to pick up the extra man. The Department of Fisheries and Oceans (DFO) helicopter, which is based at Yarmouth, was engaged in surveillance operations in the Gulf of St. Lawrence between 1730 and 1900. At 1816, R302 departed from Greenwood bound for "RYAN ROYALE" and/or Meteghan to render assistance.

The owner/operator of "RYAN ROYALE" reportedly had difficulty in contacting this helicopter by VHF radio, although there was no reported deficiency in either the radios in use or in communicating with other stations.

Some 26 minutes later, at about 1842, when "RYAN ROYALE" was approximately 1.25 miles from Meteghan wharf, R302 was advised to land there. When "RYAN ROYALE" berthed at Meteghan at 1853, she was met by an RCMP officer, ambulance attendants, and the SARTECH. However, the injured crew man did not respond to resuscitation and was pronounced dead by a local physician; an autopsy was not considered necessary.

During the run in to Meteghan, apart from removing the injured man from the winch, endeavouring to make him comfortable on the deck of the shucking house and covering him with a blanket, no other efforts at first aid were attempted. Although, it would have been possible to obtain medical advice by radiotelephone, this was not done.

Analysis

In periods of economic hardship, there is a tendency to reduce the number of crew on board fishing vessels. This was not the case on board "RYAN ROYALE" where no one was positioned at the winch controls at a critical time when the gear was being recovered. There is a potential for accidents when any powerful machinery is in use, unattended and partially unguarded. As is common with this type of winch on this type of vessel, there was no guard at the front of the winch and there was no guard over the incoming wire rope; neither was there any winch control within easy reach.

As far as practicable, all moving parts of winches which may present a hazard should be securely guarded or fenced. (Canadian Coast Guard Manual of Safety and Health for Fishermen)

Although there are enough examples of initiatives from the fishing community to improve safety awareness it is only very rarely that gear or construction is modified to improve safety and then only on an individual basis. (IInd International Symposium, Safety and Working Conditions Aboard Fishing Vessels)

Although the hazards relating to fishing and harvesting gear are evident, much of this equipment is beyond the scope and mandate of Canadian Coast Guard and is therefore unaddressed by that regulatory body, except in periodicals.

The lack of direct radio communication between "RYAN ROYALE" and the helicopter may have been due to incorrect radio operating procedure, distance between the stations, land mass and/or the helicopter being on the ground at Greenwood, N.S.

Findings

1. The cause of death was due to massive trauma when the deceased's body was crushed between the winch and the incoming wire rope, while the latter was under tension with the weight of the scallop rake, associated gear and scallops.

2. Nobody was stationed at the winch controls while the gear was being hauled back.

3. It was not possible to establish the events immediately prior to the accident, or precisely why the deceased's foot and leg had become trapped.

4. There was no treatment given to the victim while the "RYAN ROYALE" was heading to port as the crew had little experience in first aid.

Causes and Contributing Factors

A local physician determined that the cause of death was due to severe trauma. Contributing factors to the incident were lack of an operator at the winch controls, lack of a personnel guard at the after side of the winch and/or some protection between the incoming wire and the attending deck hand and the lack of first aid treatment following the accident.

Safety Action Taken

The Canadian Coast Guard (CCG) publication "Small Fishing Vessel Safety Manual - TP10038, which is widely distributed among fishing industry encourages fishermen to take a first aid course. The CCG also requires all vessels to carry a proper first aid kit.

Further in 1994, CCG issued a Ship Safety Bulletin No.3/94 "First Aid Certificates". This bulletin sets out current policy with respect to approved first aid course requirements for ratings and certificated personnel.

Since the fatal accident, the owner/operator, on his own initiative, has fitted a guard at the afterside of the winch barrel. This is a robustly-constructed fitting which performs the dual function of support for the guide bar and safety guard for the operator.

This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board, consisting of Chairperson, John W. Stants, and members Zita Brunet and Hugh MacNeil, authorized the release of this report on 11 April 1995.