MARINE OCCURRENCE REPORT

FALL OF A CREW MEMBER

ABOARD THE RUSSIAN-FLAG VESSEL "SANTIAGO DE CUBA" ON THE ST. LAWRENCE RIVER 10 MARCH 1995

REPORT NUMBER M95L0004

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

On 10 March 1995, the general cargo vessel "SANTIAGO DE CUBA", carrying 5,264 tonnes of miscellaneous steel products, was en route from Sorel, Quebec, to the port of Cacouna, Quebec.

Late in the day, the boatswain (bosun) and one deckhand proceeded to No. 1 hold to close the hatch. While the deckhand climbed down into the hold to disengage the cargo hook that was holding the cradle, the bosun went toward the crane to take up his position. However, the bosun fell and landed on the lower 'tween-deck. He was given first aid, but he died while being carried to the ship's hospital. The ship's doctor was unable to revive him and pronounced him dead. FACTUAL INFORMATION

Particulars of the Vessel

Name Port of Registry Flag Official Number Type Gross Tonnage Length Draught

Built Propulsion "SANTIAGO DE CUBA" St. Petersburg, Russia Russian 1618 General cargo 9,673 tons 151.45 m Forward: 57.0 dm Aft: 68.0 dm 1969, steel One MAN engine, 7,061 kW, driving a single fixed-pitch propeller Baltic Shipping Company St. Petersburg, Russia

Owners

The "SANTIAGO DE CUBA" has five holds, four of which are forward of the accommodation. No. 1 hold is in the raised foredeck; there is a crane on the raised deck to starboard of the centre line and aft of the hatchway to No. 1 hold.

On 10 March 1995, while the vessel was sailing through ice-infested waters with two pilots on board, the engine-room staff was carrying out repairs to the electro-hydraulic system used to open the lower 'tween-deck hatch covers. To gain access to the system, a cradle is hung from the cargo hook of the service crane for No. 1 hold.

At about 1800, the bosun informed the fourth engineer that he had to close No. 1 hold. In the company of a deckhand, the bosun arrived on the foredeck at about 1825 and told the deckhand to climb down into the hold and unhook the cargo hook from the cradle. Before entering the hold via the port manhole, the deckhand saw the bosun going toward the No. 1 crane.

When he arrived at the bottom of the hold, the deckhand called out to the bosun to lower the cargo hook, but there was no answer to his calls.

The deckhand waited a few minutes, but as there was still no sign of the bosun, he decided to climb back up to the main deck.

When he reached the deck, the deckhand saw no one near the hatchway. The crane door was open, but the electric drive motor was not turned on.

The deckhand went to the accommodation to look for the bosun. Still

All times are EST (Coordinated Universal Time (UTC) minus five hours) unless otherwise stated.

looking for the bosun, he returned to No. 1 hold and encountered the fourth engineer and the greaser on the 'tween-deck; no one had yet seen the bosun. The deckhand climbed back up the same ladders he had descended and returned to the accommodation. Still he was unable to find the bosun, and around 1855, he returned to No. 1 hold for the third time. When the repairs were completed, the fourth engineer, the greaser and the deckhand went back to the accommodation; the deckhand retired to his cabin without reporting the bosun's disappearance.

At about 1900, the chief engineer and the fourth engineer went to No. 1 hold to inspect the repairs. They proceeded via the ladders located aft of No. 1 hold, and they had a flashlight with them.

Having completed their inspection around 1920, they climbed back up to the lower 'tween-deck via the ladder on the collision bulkhead. The two engineers heard something that sounded like a groan, followed by murmuring, which they managed to locate in the aft starboard

section of the 'tween-deck.

The two engineers found the bosun lying on his left side with the hood of his parka over his head. While he tried to get up, he was asked what had happened; he did not reply, but instead asked for help to get up and out of the hold. The chief engineer went toward the accommodation to summon assistance.

At about 1930, the ship's doctor arrived at the scene and observed that the bosun's pulse was weak but very fast. The bosun was given a painkiller by injection, and placed on a stretcher to be evacuated on the cradle. The injured was carried to the ship's hospital around 2000, where the doctor attempted to revive him. His efforts were in vain, and, at 2015, the doctor pronounced him dead.

ANALYSIS

The noise of the ice rubbing against the hull likely prevented the deckhand from hearing anything, as he was in the hold when the bosun fell.

The deckhand searched almost everywhere on the vessel except in the area of No. 1 hold. The repairs were done in the opposite corner of the hold from where the injured man was found; the crew members' attention was focused on that location. In addition to a lack of lighting, the injured was wearing dark-coloured clothing, and this caused a delay in finding him.

Although the exact cause of the fall could not be determined, certain factors provide a basis for different scenarios that could account for the fatal fall. The vessel was heading north-east in a north-west wind of about 15 knots. The cabin housing the crane controls is opened by pulling the door from right to left. As there was no railing on the running board, it is possible that the wind caught the crane door when the bosun opened it, causing him to lose his balance and fall. The electric drive motor was not turned on, indicating that the bosun probably had not entered the operator's cabin of No. 1 crane.

A second possibility is that the bosun bent over the coaming to look at the bottom of the hold. The ice and snow at the aft starboard corner of the hatchway could have contributed to his falling over the coaming; it is also noted that this location is directly above the place where the injured bosun was found. No traces of oil or other products were found on the deck which could have caused a person to fall or lose their balance near the hold. The soles of the fur boots worn by the bosun could not be examined.

The body was transported to the Centre hospitalier du Grand Portage at Rivière-du-Loup, Quebec. From there, the Quebec Coroner took custody of the body and performed an autopsy. The forensic report indicated that the primary cause of death was severe cerebral trauma accompanied by fractures of the cranium. The bosun was in good physical condition, was not taking medication, did not drink alcohol, and was well liked by his co-workers. He had a medical examination on 13 July 1994 and was issued a medical certificate valid for 12 months. The bosun had been on board the vessel for one month and, according to his colleagues, he did not seem depressed or troubled.

Modifications were made to the crane during the days following the tragic accident. The running board was enlarged and a railing was installed on the platform in front of the crane cabin.

These repairs were made following a notice issued by the Canadian Coast Guard on 11 March 1995 which directed that improvements be made to provide safer access to the crane cabin.

FINDINGS

- 1. The running board in front of the crane was not fitted with a railing.
- 2. There was snow and ice on the raised deck aft and to starboard of the hatchway.
- 3. No one witnessed the bosun's fall.
- 4. The deckhand did not report the disappearance of the bosun before retiring to his cabin.
- 5. The bosun did not receive first aid for about one hour after he fell.
- 6. The bosun was unable to inform his rescuers of the cause of his fall.
- 7. Repairs were made to provide safer access to the crane.

CAUSES AND CONTRIBUTING FACTORS

The cause of the fall and the location where the bosun lost his footing on the "SANTIAGO DE CUBA" are still unknown. As the bosun was not found right away and his disappearance was not reported, the injured man did not receive first aid immediately.

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 27 September 1995.