

Accident Report

Serious Harm Injury
Tasman Resolution

20th February 2006

Class A





Photograph 1
Tasman Resolution

REPORT NO.: 96 538

VESSEL NAME: *TASMAN RESOLUTION*

Ship Type:	General Cargo Vessel
Port of Registry:	Majuro
Flag:	Marshall Islands
IMO No.:	8714918
Built:	1988
Construction Material:	Steel
Length Overall (m):	174
Gross Tonnage:	18 936
Registered Owner:	Parman MPP KS
Ship Operator:	Tasman Orient Line
Accident Investigator:	Andrew Hayton

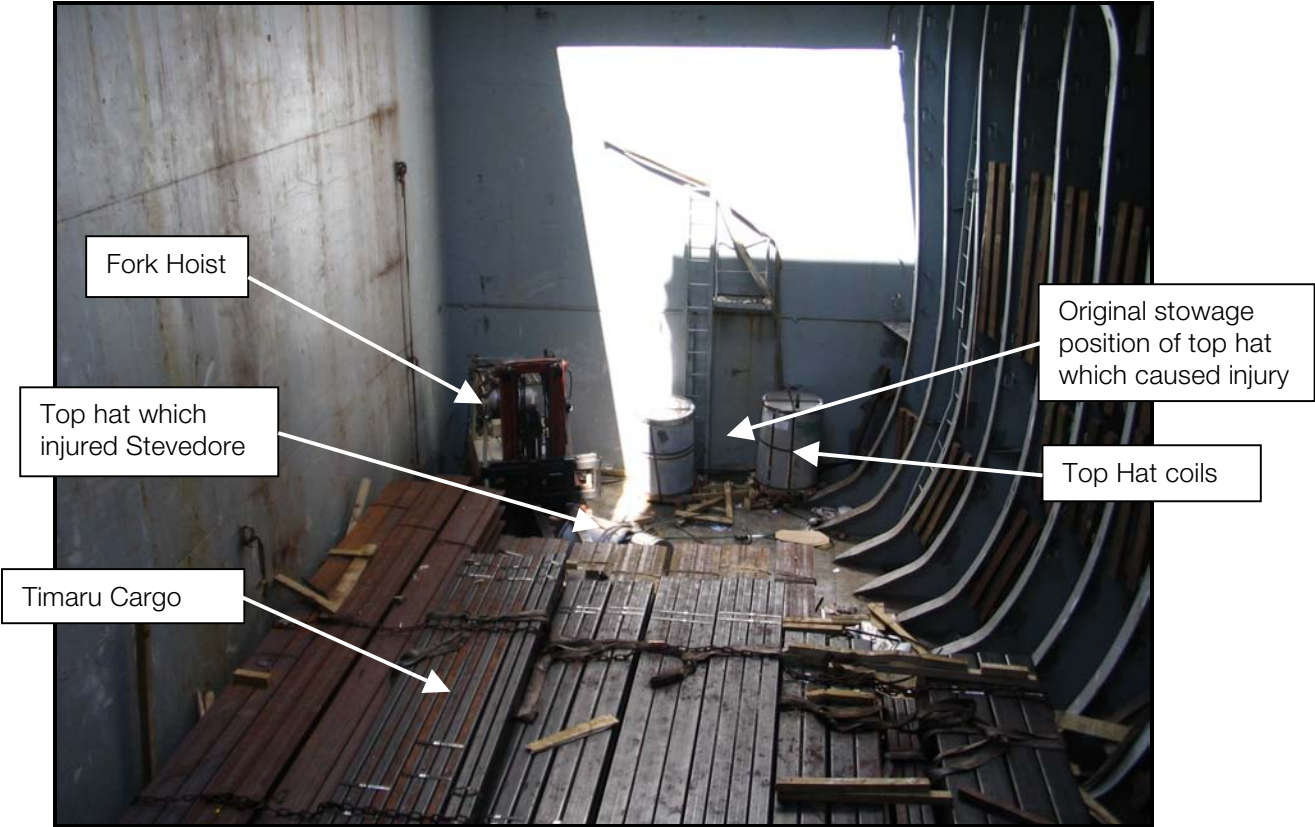
SUMMARY

On 20 February 2006, a Stevedore was seriously injured when a steel coil that was being discharged from the hold of *Tasman Resolution* trapped his leg against adjacent cargo, fracturing his femur.

NARRATIVE

The Foreman Supervisor is a twenty seven year old male. He had worked for stevedoring companies in South Africa since leaving school, his last position being a managerial position. He emigrated to New Zealand two months prior to this accident and is employed by Auckland Stevedoring Co. Ltd. He has vast experience with steel cargoes.

Tasman Resolution is a general cargo vessel operated on a liner service between ports in the Far East and New Zealand.



Photograph 2
View of Number 2 hatch looking forward

THE ACCIDENT

On 20 February 2006, a team of Stevedores was engaged in the discharge of steel products from the starboard side of No. 2 hatch of *Tasman Resolution* which was starboard side to at Jellicoe wharf in Auckland. The team consisted of a Foreman Supervisor and three Stevedores within the ships hold, a Hatchman on deck and a driver operating the ship's crane.

The cargo for discharge in Auckland consisted of steel pipes, beams and coils. The majority of the coils were stowed horizontally but there were 12 top hat coils stowed hard up against the forward bulkhead, beneath the hatch coaming. The Foreman Supervisor noticed that some of the top hat coils were labelled as being for discharge in Timaru whereas on his discharge plan they were all marked for discharge in Auckland. The Foreman Supervisor contacted the Operations Supervisor for clarification, who confirmed that the top hat coils were all to be discharged in Auckland. The remaining cargo in the hold was destined for Timaru and consisted of steel beams and pipes (See *Photograph 2*).

The Foreman Supervisor decided that due to the nature of the stow and the room within the hatch, the team would have to utilise a fork hoist as best they could in conjunction with the ship's crane in order to move the top hat coils away from the bulkhead and into the square of the hatch. This method was used successfully for the discharge of several coils. However, when there were three coils remaining, it was discovered that as they were stowed hard up against each other, it was not possible to pass wires around them to drag them into the square of the hatch nor was it possible to use the fork hoist. The Stevedores used a web sling which, being thinner than a wire, they were able to pass around the coil. The crane's pennant was attached to the sling. The Foreman Supervisor then gave orders to the hatchman which he relayed to the crane driver. The crane was slewed slowly in order to drag the coil out. As the coil was dragged, its angle away from the vertical increased and the coil fell onto its side onto the tank top.

Instead of standing up on end when the Stevedores attempted to right the coil, it swung across the deck. The Foreman Supervisor was standing in the way of the swinging coil and his leg was pinned between the coil and the adjacent steel beams (See *Photograph 3*).

The remaining members of the team were able to move the coil clear of the Foreman Supervisor and a telephone call was made immediately to the emergency services at 2144 hours.

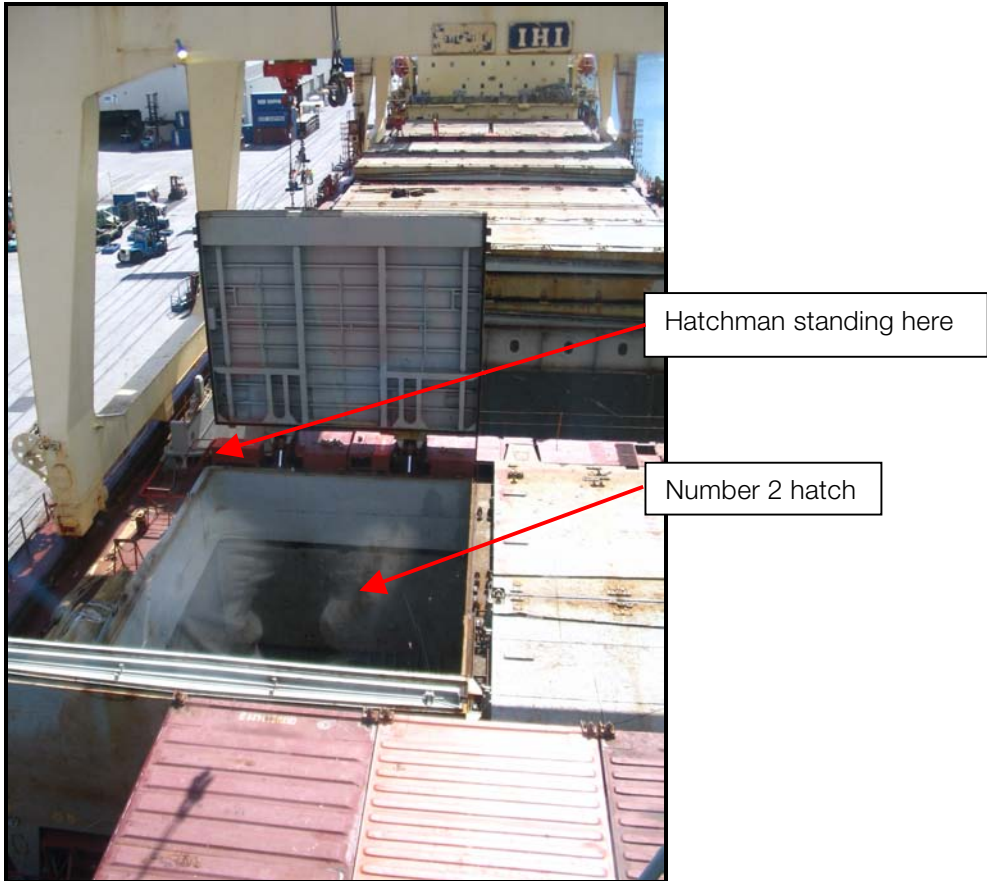
The injured Foreman Supervisor was lifted from the hold and taken by ambulance to hospital.



Photograph 3



Photograph 4
Top Hat Coil



Photograph 5
View from Crane Cab looking aft

COMMENT & ANALYSIS

The team of Stevedores commenced work at 1500 hours on 20 February 2005. Their shift was due to end at 2300 hours.

The Foreman Supervisor was in charge of the team working No. 2 hatch. He worked a roster of 40 hours over five days followed by two days off. Prior to the day of the accident, he had had three consecutive days off and was well rested.

When he commenced employment with Auckland Stevedoring Co Ltd, the Foreman Supervisor had been subject to a week long induction program.

The crane driver could not see the lower hold from his position in the crane cab. He was receiving commands via radio with the hatchman who was standing on the hatch coaming. The hatchman had a clear view of the hold below him.

The lighting within the hold was good. Light was provided by ship's cluster lights and from flood lights positioned on the gantry cranes. There was also a good deal of light provided by the glare of the wharf floodlights.

The flat web sling used in the attempt to drag the coil into the square of the hatch was constructed of polyester and had a safe working load of 5 tonnes.

The top hat coils were secured onto individual wooden pallets. They were capped at the top. Each coil had a gross weight of 3738 Kg. The coils were 1230mm in height with a diameter of 870mm.

The stow of coils consisted of 29 coils. The coils were loaded in Incheon, Korea. The 12 top hat coils were stowed two deep against the forward bulkhead of the hold and the larger coils were stowed flat immediately aft of the top hat coils.

The normal method of discharging top hat coils from beneath the hatch coaming would be by utilising a fork hoist lowered into the lower hold. The fork hoist would move the cargo into the square of the hatch for the crane to discharge. In this case, there was insufficient room to utilise the fork hoist.

No cargo superintendent was present during the discharge of the coils, nor was the ship's duty officer present at the time of the accident.

The distance from the forward bulkhead to the edge of the hatch coaming is 1.7 metres. This is the approximate distance that the stevedores had to drag the coils to enable a vertical lift be made from the square of the hatch.

The Foreman Supervisor suffered a fractured right femur, which required the insertion of a steel pin during surgery. He will be off work for several months as a result of his injuries.

CONCLUSIONS

The stowage of the steel coils was unsatisfactory. The coils were stowed hard against the ship's bulkhead and beneath the hatch coaming. The presence of cargo bound for Timaru in the square of the hatch precluded the use of a fork hoist which would normally have been used.

SAFETY RECOMMENDATIONS

1. It is recommended that a copy of this report be promulgated by the ship's operators and to all of their offices in Asia along with a reminder of the importance of correct stowage techniques.
2. It is recommended that the stevedoring company remind their employees of the dangers associated in using cranes to discharge cargo from areas outside the square of the hatch.
3. It is recommended that the stevedoring company review their procedures for dealing with the discovery of discharge cargo that has been poorly stowed at the loading port.
4. It is recommended that the stevedoring company instructs their employees in the correct places to stand during cargo operations in order to remain safe should something unforeseen occur.
5. That a copy of the final report be sent to all New Zealand Stevedoring companies.