AVA MARINE

SURVEYORS & CONSULTANTS

Loss Prevention Bulletin - AVA/2014/0013

Jan 08, 2014

FENDER DAMAGE AT RORO BERTH

Applicable to:	RoRo Vessels / Ports & Terminals
Region:	Vancouver, British Colombia
Category:	Loss Prevention

About AVA Marine Group:

AVA Marine is a professional marine surveying and consultancy firm – founded and led by its principal marine surveyor Kaivan H. Chinoy. The Company provides a comprehensive range of specialist marine surveying & consultancy services primarily in Western Canada and the West Coast of United States. Kaivan has the combined practical experience of over 15 years in sea/shore positions and before founding AVA Marine, he was involved in extensive marine operations (vessel navigation, cargo handling, bulk, break-bulk, crude oil), accident investigations, project cargo risk management and marine cargo surveying including losses exceeding USD $1000,000 and project cargo supervisions valued at over USD 20,000,000.

To learn more about our marine surveying capabilities, visit our website at ava-marine.com

AVA Marine is also the member of the AIMU (American Institute of Marine Underwriters), CBMU (Canadian Board of Marine Underwriters) and MIABC (Marine Insurance Association of British Colombia)

Location:
Annacis Auto Terminal is located on the North bank of the Fraser River at Annacis Island, Delta, British Columbia (in the vicinity of the Fraser Surrey Docks, New Westminster)

Description of the Berth:
The shore facility is a concrete wharf structure supported by timber piles. Bull rails of Douglas-Fir timber or similar type have been installed throughout the edge of the wharf face with Bollards anchored into the concrete foundation at intervals along the bull rail (timer beams). Large rubber tractor tire fenders are attached to the bull rail by a combination of large bolts, chains and shackles.

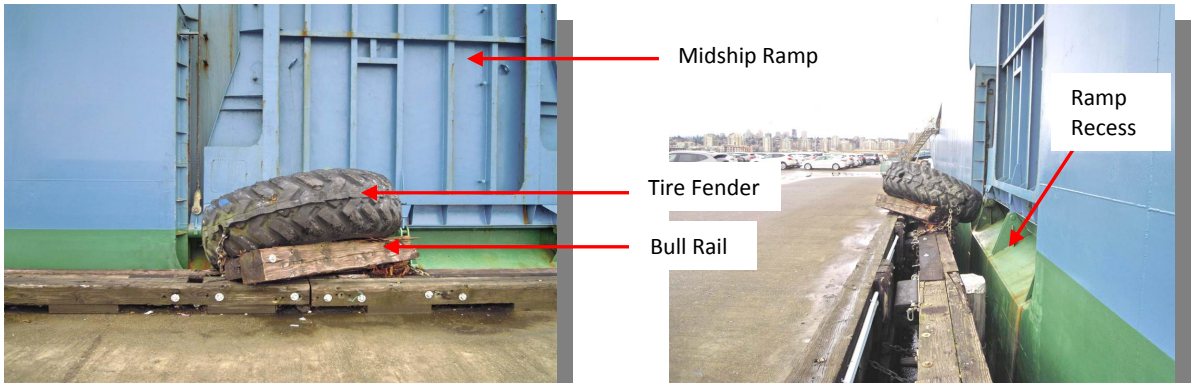
There is a secondary fendering system of small D-type fender or similar attached to the back of the bull rail via steel plates and chains. The entire structure in turn is attached to timber beams (bull rails) bolted through the dock infrastructure.

The Incident:
Recently in almost two identical incidents involving PCC (Pure Car Carriers) at the Annacis Auto Terminal operated by WWL Vehicle Services Canada, Ltd, the shore fender system suffered damages to the timber bull rail and fender attachment in way of distortion / bent bolts and steel plate and cracking of the bull rails (timber beams).

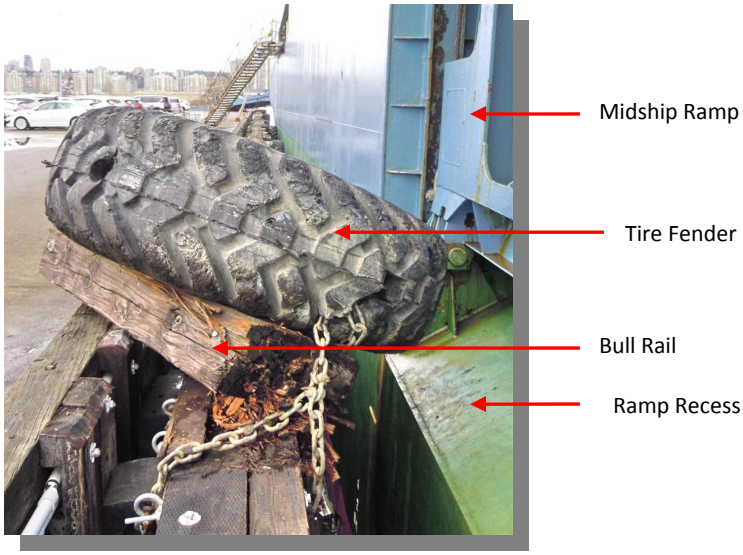
On both occasions the damage was caused when the starboard midship ramp of the vessel got caught / stuck in the ramp recess during the rising tide. The up thrust force was sufficient to cause the bull rail to break under pressure.

Recommendation:
The Master should ensure the midship ramp is not facing any rubber tire fender when the vessel is in 'position' at the dock. The final position of the vessel should be adjusted keeping the fender fore or aft of the midship ramp so that it does not get caught in the ramp recess during the rising tide.

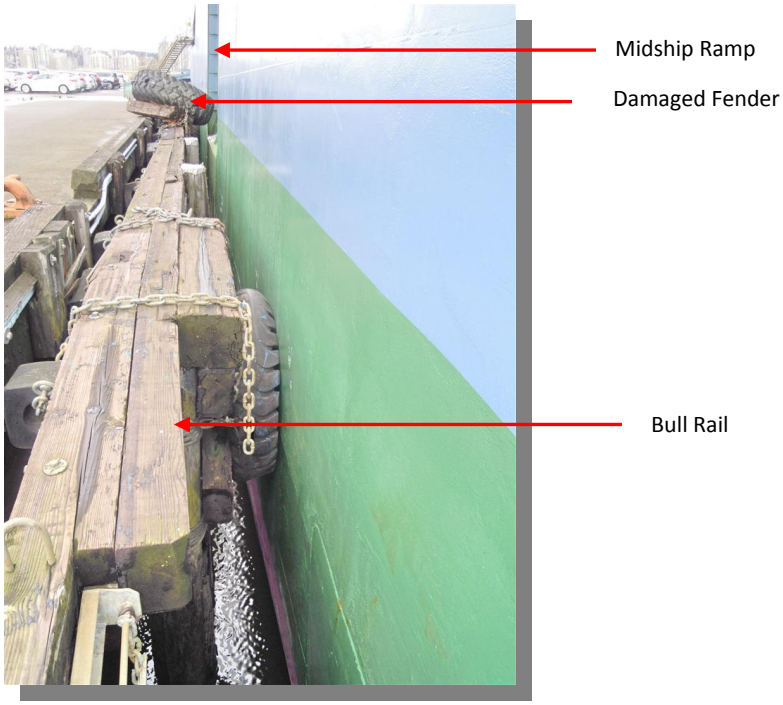
Note: The vessel will be starboard side alongside upon docking at this berth # 1.



Damage to quayside due to the fender getting caught in the ramp recess



Enlarged View



For comparison -showing the original positioning of the fender in normal conditions

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The primary function of AVA Marine as a marine consultancy firm is 'Loss Prevention' by focusing on best practices to help avert those claims that are considered avoidable and by playing an active role in keeping the shipping industry informed.

The bulletins will be circulated to the Marine Industry and P&I Clubs so that its members are kept informed. We respect your privacy and in case you do not wish to receive these bulletins then please let us know and your name shall be removed from the mailing list promptly. Contact for AVA Marine:

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