



CJA Marine Services - Singapore & Thailand

Singapore Tel : (65) 62811986 / 7 Thailand Tel: (66) 02 6811793-5
Singapore Fax : (65) 62811966 Thailand Fax : (66) 02 6811796
Mobile : +65 96815992 Mobile : +66 860088022
E-mail: survey@ejamarine.com
www.ejamarine.com

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ON DECK CARGO WASHED OVERBOARD AND LESSON LEARNED

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1.0 CONDITION OF DURING OCEAN VOYAGE

Pictures tell a thousand words and below are pictures depicting of a slight to moderate heavy sea conditions taken by seafarers. The condition of the sea during an ocean voyage can be very unpredictable and even more severe than what are shown below.



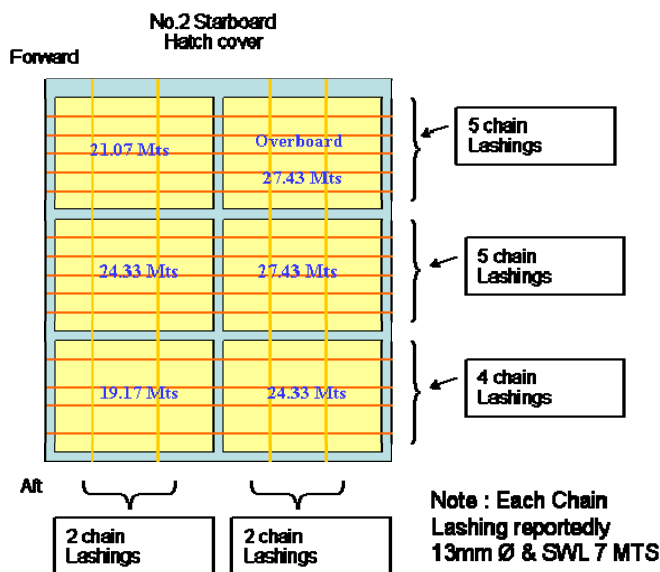
2.0 EXPERIENCE ENCOUNTERED / CAUSE OF EVENT

A vessel loaded wooden cases said to contain equipment for extension of brewery at Hamburg, Germany bound for Laem Chabang Port, Thailand. The stowage locations of the wooden cases onboard were as follows:-

- Six (6) wooden cases block stowed on deck on top of No.2 starboard hatch cover;
- Three (3) wooden cases block stowed on deck on top of No.5 starboard hatch cover; and
- Four (4) wooden cases were block stowed under deck in No. 2 Tween deck.

The Master informed us that the wooden cases **covered with tarpaulins** were loaded in an apparent good order without any exception. A total of fourteen (14) chain slings, each 13 mm thickness in diameter and 7 Mts SWL, were reportedly used to secure the six (6) wooden cases block stowed on deck on top of No.2 starboard hatch cover. In addition, metal stoppers were welded at the perimeter base of the cargo. The securing arrangement and lashings were up to Master’s satisfaction.

The Master provided us with a sketch of the securing arrangements was shown in the diagram below.



Photograph taken during the voyage with **tarpaulins washed overboard**

3.0 SURVEYOR'S INVESTIGATION / INFORMATION OBTAINED

After our discussion with the Master, we proceeded to inspect the cargoes on board and noted that **one (1) wooden case was missing**. Its broken wooden planks were not sighted. Three (3) wooden cases stowed on No. 2 hatch covers were partly broken. Seven (7) wooden cases were partly broken at the edges / side. The remaining two (2) wooden cases were in an apparent sound condition.



Case broken and tarpaulin mostly torn



Case with tarpaulin mostly torn

4.0 SURVEYOR'S COMMENTS / LOSS PREVENTION

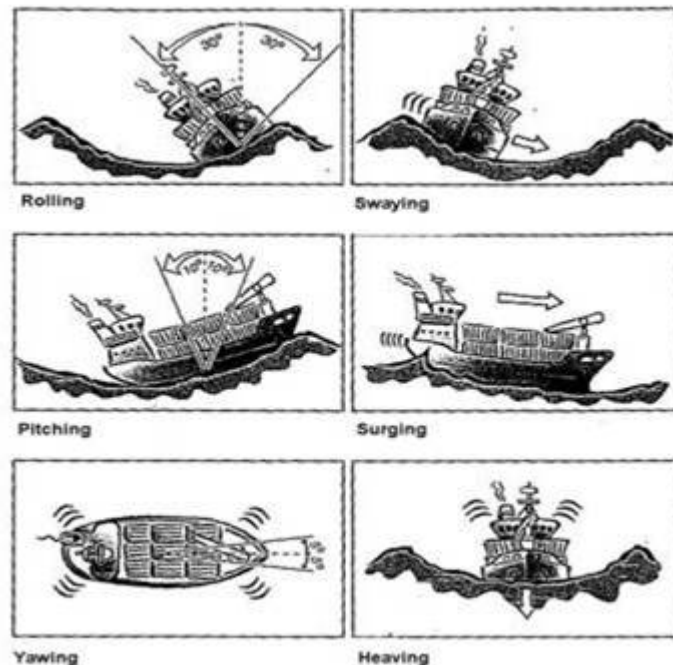
According to an extract taken from “*Lashing and Securing of Deck Cargoes*” published by M/s The Nautical Institute, page 2 and 3, Application of Lashings, were explained as follows:- We quote

*“The seaman’s rule of thumb for securing cargoes with a tendency to move during the voyage is simply that the sum of the minimum breaking loads of all the lashings should be **NOT** less than **twice** the static weight of the item of cargo to be secured. That is, a single case of 10 tonnes requires the lashings used to have a total break-load of not less than 20 tonnes on the assumption that the lashings are all positioned in a balanced, efficient, and non-abrasive manner. This rule may be adequate, or even too much, below decks - though not necessarily so in all instances - but it will be adequate on the weather-deck only in instances where a fair weather passage can be guaranteed. As this paper is concerned with the more likely sea-going circumstances where, for at least part of the voyage, winds of Force 6 and upwards together with the wave heights associated therewith are likely to be encountered, the stresses arising therefrom are those here considered.*”

*In such cases, the sailor's rule-of-thumb tends to be that the **sum of the safe working load** of all the lashings shall equal the static weight of the cargo item to be secured; the safe working load being arrived at by dividing by three 3 the minimum break or slip-load. In other words, if the break/slip load of all the lashings is 30 tonnes, then they can safely hold an item whose static weight is 10 tonnes. The author is not aware of any failures of lashings or loss of deck cargo where this rule-of-thumb has been applied in a balanced manner."*

Unquote

Deck cargoes, because of their very location and the means of which they are secured, will be subjected to velocity and acceleration stress greater, in most instances, than cargo stowed below deck. Unlike under deck cargo cargoes which are protected by shell plating, framing or bulkhead, deck cargoes have **little** or **NO** protection against the vessel rolling, pitching and heaving during the sea passage. There are six (6) movements during a sea conveyance as shown in the picture below.



Movement of vessel during sea passage

5.0 CONCLUSION / FINALLY

The purpose of document / information is to provide the reader with our surveyor's past experiences from their investigation and hopes to contribute to the prevention of similar occurrences in the future.

C Rajesh
Risk Management & Loss Prevention Consultant
For and On Behalf Of
CJA Marine Services (Thailand) Co. Ltd
Mobile: +66860088022

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