



IMO

SUB-COMMITTEE ON STABILITY AND
LOAD LINES AND ON FISHING
VESSELS SAFETY - 37th session
Agenda item 12

LIVESTOCK CARRIERS AND OTHER SHIPS REQUIRING INTERPRETATIONS OF THEIR TONNAGE MEASUREMENT ASPECTS

Submitted by Australia

Open-Top Container Ships

One of the main advantages of ships of this type is the increased protection their design generally affords to cargo compared with containers carried on deck of conventional container ships, while at the same time greatly reducing requirements for cargo lashing. Australia expects that the requirements for open-top ships, currently being developed by this and other sub-committees, will provide a satisfactory basis for ensuring that this equivalent or improved safety carries over into the general safety of these ships.

It was with this in mind that the Australian delegation to SLF 36 requested that the issue of measurement of tonnage of open-top ships should be re-opened.

The increased protection mentioned above results from these ships generally having more of their available cargo spaces located below hatch coaming level than on conventional container ships of similar capacity. TM.5/Circ.3 therefore effectively requires these ships to not only have more of their container spaces measured for tonnage under the 1969 Convention, but also requires any measurable spaces (eg. increased height of ship sides) providing the improved protection to be included in gross tonnage.

Australia has been unable to suggest any method of overcoming this anomaly between the two types of ship without either creating a new type of open shelter-decker or substantially increasing the gross tonnage of existing container ships measured under the Convention.

In an attempt to quantify the problem, Australia has examined the gross tonnage, TEU (twenty-foot equivalent unit) capacity and above-deck TEU capacity, where available, of 57 designs of container ships built in the past one or two years. Of these designs, two are of the open-top type, "Bell Pioneer" and "Nedlloyd Asia". The first step was to plot gross tonnage per TEU against gross tonnage (Figure 1). This gave a substantial spread of values between 9 and 20 gross/TEU for small ships but narrowing to 12 to 15 towards the larger end of the range. It showed "Bell Pioneer" to have a value towards the high side of the range, but "Nedlloyd Asia" is close to average. As a next step, the values of gross tonnage for ships having above-deck TEU capacities available were converted to measured volume and a modified gross tonnage computed by adding the volume of above-deck containers. This modified gross tonnage was divided by the ship's total TEU capacity to give a value of modified tonnage/TEU if all container space had been measured (Figure 2). In this case, "Bell Pioneer" plotted slightly above average, while "Nedlloyd Asia" had a value on the low edge of the range for its size. Finally, a ratio of original to modified gross tonnage was computed (Figure 3), showing "Nedlloyd Asia" at the top of the range for conventional ships, while "Bell Pioneer" had a value of 0.95 compared with the mean of about 0.65 for a ship of its size.

It was concluded that smaller open-top ships such as "Bell Pioneer" are heavily disadvantaged in gross tonnage compared with conventional container ships, while "Nedlloyd Asia" as a much larger ship is not. In the absence

of data for open-top designs of intermediate tonnages, it is difficult to determine the ship size at which the disadvantage disappears. However, as the disadvantage is related to the amount of increased freeboard required to restrict the ingress of green water into an open-top ship, and bearing in mind the relatively low freeboard of some conventional container ships carrying up to about 2000 TEU, it appears reasonable to expect that the disadvantage might disappear at a gross tonnage of about 30000. If this is assumed to be the case, the 1969 Convention gross tonnage of below this value for an open-top container ship could be converted to the upper bound of the range for an equivalent conventional ship by reducing that tonnage by 0.95% for every 1000 gross tonnage below 30000.

It is noted that some Australian port authorities have recently been reported as discounting their tonnage-based fees for certain types of ships (eg. car carriers) in order to attract trade. The principle of discounting would appear to be an appropriate method of overcoming this anomaly without undermining the 1969 Convention or penalising existing container ships.

Australia therefore suggests that the Sub-Committee should propose to MSC the promulgation of an MSC circular recommending the discounting of tonnage-based fees for open-top container ships by 0.95% for every 1000 gross tonnage less than 30000. For this purpose, it is suggested that an "open-top container ship" might be defined as a ship to which the provisions of the "Revised Provisional Requirements for Open-Top Container Ships" apply in respect of at least half of the vessel's total cargo space. To avoid the need for individual authorities to calculate the discount in relation to each transaction, the 1969 Tonnage certificate of each affected ship should bear a notation similar to "In accordance with IMO document MSC/Circ...., it is recommended that the above tonnages should be reduced by% for the sole purpose of calculation of tonnage-based fees", signed by the relevant tonnage measuring authority.

Livestock Carriers

Australia is of the view that the 1969 Convention tonnage of ships of this type should include the above-deck livestock houses, which it considers to come within the meaning of "other means for securing cargo" in regulation 2(5) of Annex 1 to the Convention. Failure to adopt such an interpretation will most likely result in the creation of a new class of open shelter-decker.

In recognition of the possibility that some authorities may not wish to see the livestock trade adversely effected by the implementation of the 1969 Convention and the above-mentioned interpretation, the Sub-Committee may wish to recommend application to livestock carriers of a similar scheme to that outlined above by providing recommended tonnage values (which exclude the volumes of above-deck livestock houses) for fee calculation purposes. Adoption of the two measures in parallel would provide for a consistent approach to such tonnage anomalies. The difference between the two ship types would be that the note to the 1969 Convention certificate for a livestock carrier would contain recommended gross and net tonnage values and could be worded "In accordance with MSC/Circ...., the volume of above-deck livestock houses iscubic metres. It is therefore recommended that the following tonnage values should be used for the sole purpose of calculation of tonnage-based fees:

GROSS TONNAGE.....
NET TONNAGE....."

Recommendation

The Sub-Committee is invited to consider the above-mentioned proposals and decide as appropriate.

CONTAINER SHIPS - RATIO OF GROSS TONNAGE TO T.E.U.

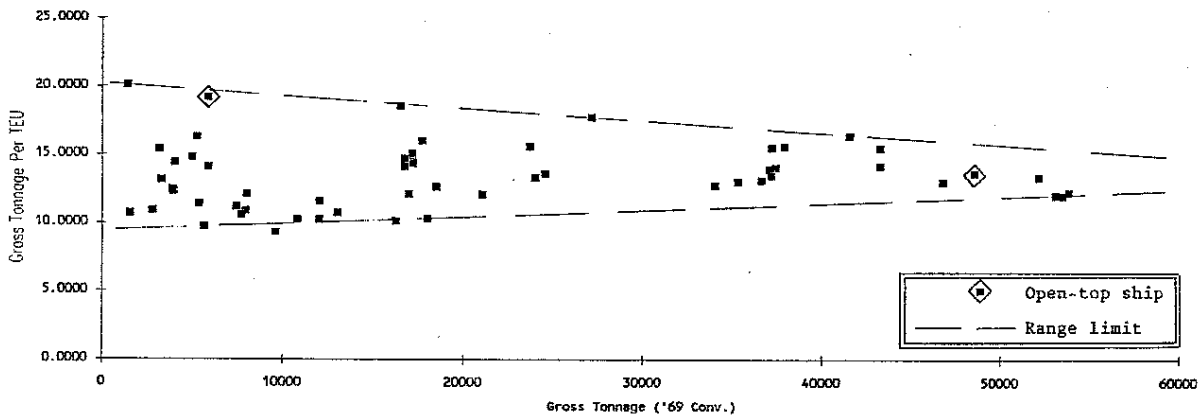


FIGURE 1.

MODIFIED GROSS TONNAGE PER TEU OF CONTAINER SHIP CAPACITY

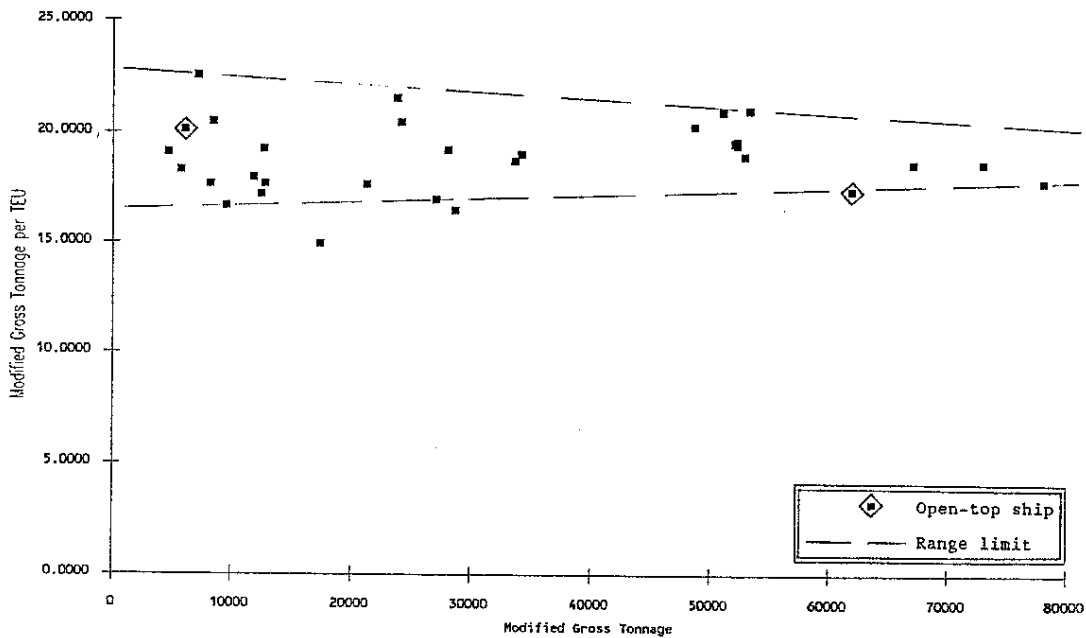


FIGURE 2.

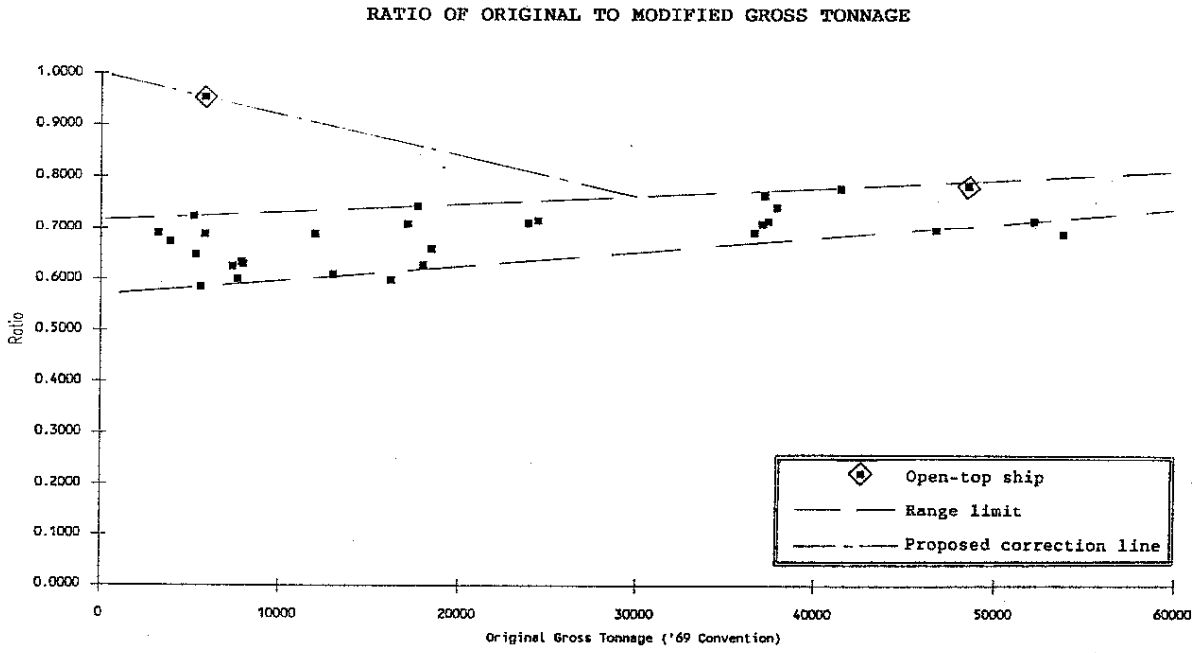


FIGURE 3.

