COPY of letter from:-

C. OUTHWAITE, Naval Architect & Consulting Engineer,

HULL,

dated 2/9/47.

To:-

Messrs. Metcalf Motor Coasters Ltd.,
4, New London Street, LONDON, E.C. 3.

Dear Sirs,

m/v "ROSE-JULIE M"

With reference to your letter of the 11th June, 1947, I have examined the question of improving the ballast condition of the above vessel and beg to make the following observations:-

Suggested Condition of Ballast.

The introduction of a Double Bottom Ballast Tank extending from the collision bulkhead to frame 47 say 2'4" deep (see drawing) capacity approx. 50 tons would enable the aft peak tank 28 tons to be utilised resulting in a total increased mean immersion of 6.5 = 12 inches plus 1½" due to additional material being placed on board for the construction of D.B. Tank, giving a draft aft of 7'10" and a draft Fwd. of 4'3" Draft Mean 6'0½". This proposal would greatly tend to more evenly distribute the loading in ballast long the vessel's length and thus help to obviate the tendency of excessive hogging strains and stresses and also greatly improve the vessel's grip fwd. and aft.

The present capacity of the hold including hatchways is 24100 cu.ft. and the actual cargo-carrying capacity on the summer freeboard being 460 tons, giving a stowage factor of 52.4 cubic ft. per ton. The loss in hold capacity and cargo-carrying due to additional weight of material for the installation of the D.B. tank would be 1 000 cubic ft. and 10 tons respectively, giving a stowage factor of 51.4 cu.ft. per ton. This appears ample for coal-carrying cargoes and due allowance for the empty pocket which generally occurs at the forward end of the hold adjacent to the deck level. If, however, it is desired that the cuubic of the hold should remain approx. the same, the after hatchway could be increased in height of say 18 inches as shewn on drawing.

Proposed construction of D.B. Tank.

The method of construction for the proposed double bottom tank fwd.

so as not to interfere with the existing open type floor design, I suggest that approval be obtained from the Classification Society concerned to the design as shewn on the enclosed drawing. This type of construction would prove inexpensive and the time taken to complete this work greatly reduced, also the minimum amount of weight of material used.

CONCLUSION.

After examining every aspect of the matter I am of the opinion that the fitting of a double bottom tank as shewn on the enclosed drawing would be the most economical manner in improving the vessel's ballast condition and her general longitudinal strength.

Yours faithfully,

(SIGNED) C. OUTHWAITE.