

Shipbuilders: Messrs. CLELANDS (SUCCESSORS) LTD Yard No. 77

Engineers: Messrs. BRITISH POLAR ENGINES LTD Engine No. 502.

It is submitted the Newcastle Surveyors be informed the torsional vibration characteristics of the main machinery intended for the above vessel have been examined in conjunction with the Firm's calculations and found satisfactory provided the screwshaft be tapered down to the top of the cone as shown amended on the plan, the reduction in diameter being achieved by forging, not by machining, and a notice board be fitted at the control station stating that the engines of this vessel must not be run continuously between 190 and 264 r.p.m.

It should be pointed out to the Firm with reference to their calculation sheet, that the stress in the screwshaft should be based on a diameter of 5", this being the diameter at the top of the cone, and not on the diameter of 7" as stated on their calculation sheet.

The Firm should be requested to forward torsiograph records taken at 227 r.p.m. and at full engine speed in order to check the 10<sup>th</sup> order stress and the flank stress due to the 5<sup>th</sup> order respectively.

Forward the London Office copy of plan of 'Stern tubes and Shafting' to Surveyors for noting

~~Request Return of plans for amendment.~~

" Return of London copy.

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Lloyd's Register  
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