

COPY.

ATLAS DIESEL CO. LTD.

BERESFORD AVENUE,

WEMBLEY, MIDDX.

11th March, 1946.

1671/216
GFT.

Goole Shipbuilding & Repairing Co. Ltd.,
GOOLE.

Re: M/V "KILLURIN" - CLELANDS YARD No. 77.



Dear Sirs,

We acknowledge receipt of yours of the 7th inst. together with copy of letter received from Lloyd's Register of Shipping, Newcastle. Actually, we ourselves received of a similar letter addressed to British Polar Engines, Ltd.

We very much regret the position which has arisen and would make the following observations:-

When Lloyd's issued their regulations to the effect that where a one node major critical occurred above the running range it should not be less than 30% above the service speed, they obviously included a fairly generous factor of safety and this factor of safety must in turn have included an allowance for discrepancies between measured and calculated critical speeds. In complicated torsional systems such as obtain in Marine installations, it is not unreasonable to allow a margin of error of as much as 5% and in this particular instance the discrepancy amounts to 6½%.

It therefore does not seem to us that Lloyd's, after approving a vibration system with the one node major critical calculated at 30% above the service speed, are entitled to restrict the maximum revolutions to a value which makes the measured critical 30% above the service speed. It should be further noted that but for the fact that the tailshaft minimum diameter was reduced to 5" at the propeller cone, after the works calculation was made but with the approval of Lloyd's the vibration stress in the tailshaft at service speed would be entirely negligible.

We are afraid that nothing can be done to raise the revolutions to those originally specified with the present arrangement but we are asking the works to look into the matter for us. At the same time we would point out that we do not consider that the works can be held responsible for the restriction in revolutions imposed by Lloyd's, in view of the fact that Lloyd's agreed to the reduction of 5" at the propeller cone.

Yours faithfully,
(Sgd) G.F. Temple.

W1027-0202

Diesel engine Department.