

"ALPHA" No.01047 in R.B.

The machinery of the above ship was dismantled 12.55 and she was classed +100A1 barge to be towed. The New Orleans Surveyor reported that new machinery from a corvette had been fitted in April, 1957, consisting of 2 Scotch boilers with a total heating surface of 7150 ft.² supplying steam to a 4 cylinder triple-expansion steam engine developing 2210 I.H.P. at 185 RPM. The engine was intended for use with gearing to reduce the propeller speed to 105 RPM but as the gearing would not be ready until August, the engine was connected directly to the propeller shaft and a smaller propeller with a diameter of 12 ft. and pitch of 7 ft. 6 ins. was fitted as a temporary measure.

The ship is on a voyage from Alexandria to the U.S.A. with a cargo of molasses, but has not got further than Ceuta where she is now lying. Prior to commencing this voyage she was under survey at Alexandria in September on account of machinery failure caused by the boiler feed water being mixed with dirty and oily sea water.

There appear to be considerable financial difficulties in the way of continuing the voyage according to the report of the Salvage Association's representatives who have investigated the position at Ceuta. They further state that the ship's bottom is foul (she was last docked 4.57), the maximum speed on the voyage from Alexandria was 6.2 knots and in somewhat roughish weather she made only 3.5 knots; the condition of the boilers and engine are satisfactory but only capable of producing 110 RPM which, they state, under favourable conditions gives a speed a little over 7 knots. In their opinion the ship is not fit to continue the voyage because (a) the bunker capacity is insufficient for her to make the East-West crossing of the Atlantic in winter with an adequate margin of fuel, even allowing for replenishing the bunkers at the Azores en route, and (b) the ship is under-powered.

Mr. Hopwood feels that the Society may be criticised by foreign insurance interests because of the situation which has developed.

Classification does not, of course, deal with bunker capacity or the power of the engine in relation to the size of a ship, which must be matters for the Owners to decide having regard to the trade in which they intend to use the ship, but with reference to the suggestion that the ship is under powered the following comparison is of interest:

	<u>Length</u>	<u>Gross tonnage</u>	<u>I.H.P.</u>	<u>Speed in knots</u>
ALPHA	359 ft.	4519	2210	-
LIBERTY SHIP	About 420 ft.	About 7200	About 2500	About 10

It would be expected that, with a suitable propeller, the "ALPHA" would have no difficulty in attaining a speed of at least 10 knots under normal conditions. If the engine were able to achieve the designed speed of 185 RPM directly connected to the present propeller having a pitch of 7 ft. 6 ins, the speed would be about 11 knots even allowing a very high slip of 20%.

Unfortunately, although a 6 hour dock trial was made after fitting the new machinery, no sea trial was carried out and in reply to our cabled enquiry of the 22nd instant as to the maximum RPM and I.H.P. of the main engine at the dock trials and any information on the maximum speed of the ship with the present machinery, the New Orleans Surveyor cabled:



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"REURTEL ALPHA MAXIMUM RPM DOCK TRIAL
SEVENTY LIMITED BY POOR MOORING FACILITIES
NO INDICATION IHP STOP STATED MAXIMUM
SPEED EIGHT KNOTS PRESENT MACHINERY."

There is therefore no reliable information as to the maximum speed of the ship or the maximum RPM of which the engine is capable with the present propeller, but it appears obvious that the engine is not able to turn the propeller at anything like the designed 185 RPM and that the propeller is not suitable for the engine.

The American Committee's minute on the New Orleans reports was to the effect that the class should be amended to +100A1 "Carrying Petroleum in Bulk" with records B.S. 4.57, N.B. '41, N.B. '40, refitted 4.57, but this has not been confirmed because of the hull survey position - the shell plating was not drilled although the year of grace expired 2.57.

It is not seen that there is any valid reason for expunging the class, but it is submitted for consideration whether the class should be suspended pending completion of the hull survey and the carrying out of a satisfactory full power sea trial in view of the apparent unsuitability of the temporary propeller.

27.11.57

WMS

From the above I judge there is
nothing mechanically wrong. The
trouble is that the propeller is unsuitable
for the engine & perhaps for the hull.
I don't think that in something LR
can be blamed for.

I think the ship should remain in class.
All we know is that she can go
at 7 knots without if say 10 or 11.
That does not affect class.