

4 E

Inspected by Chief Engineer Surveyor

Received from Chief Engineer Surveyor

117261  
 278  
 14714  
 117950  
 117096

VESSEL'S NAME "MAGDALENA"

REPORT

Remarks of the Chief Engineer Surveyor are desired on this case for the consideration of the Classing Committee.

("The endorsement to contain a succinct summary of any repairs that have been required and to show the cause or causes of such repairs, and also to bring out clearly any exceptional features in connection with the case, so that the Classing Committee may have all the salient points presented in the endorsement."—Extract from Sub-Committee's Report, 24/5/92.)

REPAIRS TO ENGINES AND BOILERS DUE TO DAMAGE THROUGHOUT

Type of Engine: 6 Steam Turbines D.R. geared to two screw shafts

HS 28375 sq. ft.

MN 4380

If Boilers fitted with forced draught Yes

Tail Shaft. If fitted with continuous liner Yes

The torsional vibration characteristics of the 540 B.H.P. generator sets were approved in Secretary's letter of 19.3.47 for a service speed of 300 R.P.M.

Similar calculations in respect of the 144 B.H.P. generator set were approved in Secretary's letter of 7.1.49 for a service speed of 1200 R.P.M.

During sea trials, a tube in the port main boiler burst. After subsequent examination, it was stated that serious overheating was evident. A number of tubes in way were renewed. The side water wall tubes were found somewhat distorted, but considered efficient. All original tubes were re-expanded and found tight on hydraulic test. The Surveyor recommends the distorted tubes be renewed at the Owners convenience.

Leakage was also noted in way of Ogee ring in both donkey boilers. Repairs have now been effected, but the Surveyor recommends these items be specially examined on return to U.K.

The London Surveyors report that a second burst occurred in the port main boiler when raising steam. This occurred in one of the tubes which were renewed in Belfast.

Examination showed considerable overheating of water wall tubes and a number of tubes distorted in way of burst tubes. Other parts of the boiler were found in good order, although appearance of water drum indicated possible water shortage. Examination made of gauge glasses and water level control gear. Inboard gauge glass found damaged and foreign bodies inside the water fittings which might have caused a false reading of water level. Defective parts now renewed and water level control gear overhauled and adjusted.

All distorted tubes noted by the Belfast Surveyor now renewed, including those now distorted (a total of 145 tubes). The boiler hydraulically tested and found in order and the Surveyor recommends the special condition regarding the port main boiler be now deleted from the S.R.L.



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IT IS SUBMITTED that this vessel is eligible for  
the Record ~~of~~ LMC 2.49,  
"Fitted for oil fuel 2.49, F.P. above 150° F",  
2 WTB 570 lb. (Spt. 525 lb.) F.D.  
2 DB 100 lb.

Subject to the Ogee ring in both donkey boilers  
being specially examined on return to U.K.

Note for S.R.L.:- Economisers to examine at each MBS.  
"Steam generator" to examine at each  
DBS.

The Belfast Surveyors should be informed that the  
MN should have been calculated on the maximum S.H.P.  
of 19800 and that the correct figure appears to be  
4380, and not 4147. X

Note for R.M.C.

4 generators - P. Outer  
P. Inner  
S. Inner  
S. Outer. *QJ.*

*L.H.*  
14. 4. 49.



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