

No. 8283

# REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES & BOILERS

(Received at London Office 27 AUG 1946)

Date of writing Report 16.7.1946 When handed in at Local Office 16.7.1946 Port of BOMBAY  
 Survey held at BOMBAY Date First Survey 28-12-45 Last Survey 20-6-1946  
 (No. of Visits 16)  
 on the Machinery of the Wood, Iron or Steel S.S. BULAN

Gross 1048 Vessel built at Glasgow By whom A. Stephen & Sons Id. When 1924 - 6  
 Net 442 Engines made at Glasgow By whom A. Stephen & Sons Id. When 1924 - 6  
 Boilers, when made (Main) (Donkey)  
 Owners P. & O. Stm. Nav. Co. Id. Owners' Address  
 (If not already recorded in Appendix to Register Book.)  
 Managers Port Glasgow Voyage SINGAPORE  
 If Surveyed Afloat & in Dry Dock Marweather Dry dock  
 (State name of Dock.)

### Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

CHARACTER. *for Special Survey, Date of last Survey and of Periodical Surveys.	Years Assigned how expir'd	Machinery and Boiler surveys (including date of N.B., if any)
<u>+ 8, 27</u> <u>(Reclassification Contemplated)</u> <u>Fitted for oil fuel.</u>		<u>T</u>

### Particulars of Examination and Repairs (if any) Off-Survey & Re-Classification

All Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the nature and extent of Examinations and subsequent Repairs. On account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case.

Where the Surveyor has not made a special damage report he is required to state whether he offered services for this purpose, and why they were declined   
 Damage report made by any one else? If so, by whom?   
 Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? YES  
 Surveyor personally go inside each Donkey Boiler separately and make a thorough examination at this time?   
 If not done, state for what reasons?   
 Parts of the Boilers could not be thus thoroughly examined?   
 Special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?   
 Date of internal examination of each boiler PORT AND STARBOARD 3<sup>RD</sup> MAY 1946 Present condition of funnel Good  
 Surveyor examine the Safety Valves of the Main Boiler? YES To what pressure were they afterwards adjusted under steam? 170 LBS.  
 Surveyor examine the Safety Valves of Donkey Boiler?  To what pressure were they afterwards adjusted under steam?   
 Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? YES and of the Donkey Boilers?   
 Surveyor examine the drain plugs of the Main Boilers?  and of the Donkey Boilers?   
 The mountings of the Main Boilers? YES and of the Donkey Boilers?   
 Main shaft drawn and examined? YES Is it fitted with continuous liner? YES Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? NO  
 Donkey shaft drawn and examined?  If so, state reasons?  Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?   
 Distance between lignum vitae of stern bush and top of after bearing of screw shaft 5<sup>TH</sup> JUNE 1946 State the distance between lignum vitae CLOSE  
 Electric light and power fitted? YES  
 Is electric light and power fitted? YES  
 Is the resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? YES  
 Complete, state what arrangements have been made for its completion and what remains to be done. COMPLETE

The vessel, whilst in Government Service had been converted to a cable ship. Government machinery and fittings have now been removed and the machinery of this vessel restored to its original specification. The two 7 K.W. steam driven generators which were fitted at this port 2 seven K.W. generators could not be obtained so 2 new 10 K.W. steam driven generators Sunderland Forge Co. were fitted filled  
FOR L.M.C. AND T.S. (CL). Vessel in dry dock. Propeller and stern tube external fastenings examined and found efficient. The screw shaft was drawn inboard, examined and found to be in good condition. P.T.O.

### Observations, Opinion, and Recommendations:—

State what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9,11, B.&M.S. 9,11, \*L.M.C. 9,11, or \*L.M.C. 140 lb., F.D., &c.)  
 The machinery of this vessel, is eligible, in my opinion, to be reclassified classed with record of L.M.C. 6,46 and T.S. (CL) 6,46

(per Section 29) LMC & TS Rs 552/-  
Elec. Installations Rs 75/-  
Repair Fee (if any) Rs 100/-  
 Expenses (if chargeable) Rs 50/-

Fees applied for 16.7.1946  
 Received by me, 19.46

T.H. Noel  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute 20 SEP 1946  
+ LMC 6 46  
56 46

Fitted for oil fuel re  
 CERTIFICATE WRITTEN



The after bush was completely rewooded.

All sea connections were opened up, overhauled, examined and refitted.

BOILERS. The two main boilers were examined internally and externally with all their mountings and found or placed in good condition. The boilers were subsequently examined under steam and found satisfactory and the safety valves adjusted to the above pressure. OIL FUEL INSTALLATION EXAMINED UNDER WORKING CONDITIONS AND FOUND SATISFACTORY.

Machinery - Main engines. All cylinders and pistons, all slide valves and casings, all crankshaft pins, bearings and bolts, all crank shaft journals and bearings, thrust and thrust shaft complete with bearings, all tunnel shafting and bearings, ~~all tunnel shafting and bearings~~, all attached pumps, the main condenser, all the above found or placed in good condition.

Auxiliaries. All independent feed pumps, the main circulating pump and engine, the general service pump, ballast pump and bilge pump together with all their connections and pumping arrangements examined and found or placed in good condition.

Oil fuel unit. The oil fuel pumps and transfer pump, the heaters and strainers, all oil fuel valves and lines, extended spindles to oil suction and fire extinguishing valves examined, fire extinguishers and all other fittings examined and found or placed in good condition.

Steam pipes. All main and auxiliary steam pipes over 3" bore removed to workshop, stripped of all lagging, examined externally and internally as far as practicable and subsequently tested to twice their working pressure.

ELECTRICAL. The generators and their steam engines are new (as noted above) and are of substantial construction. All cables, switch gear, and fuses examined and an insulation resistance test carried out on all circuits and generators and all defects made good.

REPAIRS DUE TO WEAR AND TEAR.

- (1) Main engine crank shaft lifted, bottom halves of main bearings re-metalled and shaft bedded down and re-aligned.
- (2) All main engine junk ring studs re-newed.
- (3) All main engine bearings, valves, valve gear and piston rings adjusted as necessary.
- (4) All main engine attached ram pumps-rams machined as necessary, neck and gland bushes renewed.
- (5) All pumps overhauled, cylinders and liquid ends bored out or re-lined as necessary and all pistons, buckets, valves and gear renewed or adjusted as necessary.
- (6) Main and auxiliary condensers tested and found satisfactory.
- (7) Boilers- All mountings overhauled - cover and gland studs, seats and valve lids of feed check and steam valves renewed or overhauled as necessary. All safety valves valve seats and lids renewed.

*T.H. Noel*