

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

16 AUG 1933

Date of writing Report *17 Aug 1933* When handed in at Local Office *17 Aug 1933* Port of *Beefast*

No. in Survey held at *Beefast* Date, First Survey *21st March 1933* Last Survey *11 August 1933*  
 Reg. Book. on the *T.S.S. "PRABHAVATI"* (Number of Visits *58*) Tons <sup>Gross</sup> *556* <sub>Net</sub> *205*

Built at *Glasgow* By whom built *Harland & Wolff Ltd.* Yard No. *9296* When built *1933-9*

Engines made at *Beefast* By whom made *Harland & Wolff Ltd.* Engine No. *9299* When made *1933*

Boilers made at *Beefast* By whom made *Harland & Wolff Ltd.* Boiler No. *9299* When made *1933*

Registered Horse Power Owners *Bombay Star Nav. Co. Ltd.* Port belonging to *Bombay*

Nom. Horse Power as per Rule *260* Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted *Yes*

Trade for which Vessel is intended *Ocean going*

ENGINES, &c.—Description of Engines *Inverted triple expansion* Revs. per minute *220*

Dia. of Cylinders *11 1/2" - 20" - 34"* Length of Stroke *24"* No. of Cylinders *Six* No. of Cranks *Six*

Crank shaft, dia. of journals *6.525"* as per Rule *6.525"* as fitted *6 3/4"* Crank pin dia. *6 3/4"* Crank webs Mid. length breadth *13 1/2"* Thickness parallel to axis *4 1/2"*  
 Mid. length thickness *4 1/2"* shrunk Thickness around eye-hole *3"*

Intermediate Shafts, diameter as per Rule *6.215"* as fitted *6 3/8"* Thrust shaft, diameter at collars as per Rule *6.525"* as fitted *6 7/8"*

Tube Shafts, diameter as per Rule *7.055"* as fitted *7 3/8"* Is the <sup>tube</sup> screw shaft fitted with a continuous liner *No*

3-9 Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as fitted Is the after end of the liner made watertight in the propeller boss *Yes* If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *Yes*

If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes*

If two liners are fitted, is the shaft lapped or protected between the liners *Yes* Is an approved Oil Gland or other appliance fitted at the after end of the tube *Yes*

shaft *Yes* If so, state type *Kewark Patent* Length of Bearing in Stern Bush next to and supporting propeller *2'-11 3/4"*

Propeller, dia. *7'-0"* Pitch *8'-5"* No. of Blades *4* Material *Man. Br.* whether Movable *No.* Total Developed Surface ca. *17* sq. feet

Feed Pumps worked from the Main Engines, No. *2* Diameter *3 3/4"* Stroke *10"* Can one be overhauled while the other is at work *Yes*

Bilge Pumps worked from the Main Engines, No. *2* Diameter *3"* Stroke *10"* Can one be overhauled while the other is at work *Yes*

Feed Pumps No. and size How driven Pumps connected to the Main Bilge Line No. and size How driven

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room In Hold, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

That Pipes pass through the bunkers How are they protected

That pipes pass through the deep tanks Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record *S*) Total Heating Surface of Boilers *4563 sq ft*

Forced Draft fitted *Yes* No. and Description of Boilers *One D.E. Cyl. Multi?* Working Pressure *200 lbs/sq"*

IS A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes* *IDB*

IS A DONKEY BOILER FITTED? If so, is a report now forwarded?

Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*

(If not state date of approval)

Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.

Are the spare gear required by the Rules been supplied *Yes*

Are the principal additional spare gear supplied *See list appended.*

The foregoing is a correct description.  
 For HARLAND AND WOLFF, LIMITED.

*W. Marshall*  
 Assistant Secretary

Manufacturer.



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 Lloyd's Register  
 Foundation  
 W1317-0125

1933

During progress of work in shops -- { Mar 2. 30 Apr 3. 12. 14. 19. 20. 24. 26. 27. 28. 29 May 1. 5. 8. 9. 16. 17. 22. 25. 31 June 1. 2. 5. 6. 7. 8. 9. 12. 13. 15. 16. 19. 20. 21. 22. 26. 27. 29. 30 July 3. 4. 6. 19. 21. 24. 25. 26. 27. 28. 31 }  
 Aug 1. 3. 4. 7. 9. 10 11

Dates of Survey while building {  
 During erection on board vessel --- {  
 Total No. of visits 58 +

Dates of Examination of principal parts—Cylinders 9.6.33 to 19.7.33 Slides 25.7.33 Covers 9.6.33 to 19.7.33  
 Pistons 25.7.33 Piston Rods 21.7.33 25.7.33 Connecting rods 1.8.33  
 Crank shaft 21.7.33 Thrust shaft 31.7.33 Intermediate shafts 24.7.33 25.7.33  
 Tube shaft ✓ Screw shaft 25.7.33 Propeller 21.7.33  
 Stern tube 27.7.33 Engine and boiler seatings Engines holding down bolts  
 Completion of fitting sea connections  
 Completion of pumping arrangements Boilers fixed Engines tried under steam  
 Main boiler safety valves adjusted Thickness of adjusting washers  
 Crank shaft material S.M. STEEL Identification Mark LLOYD'S N° 190 Thrust shaft material S.M. STEEL Identification Mark LLOYD'S N° 190  
 Intermediate shafts, material S.M. STEEL Identification Marks LLOYD'S N° 190 Tube shaft, material ✓ Identification Mark ✓  
 Spare 191  
 Screw shaft, material S.M. STEEL Identification Mark LLOYD'S N° 190 Steam Pipes, material Test pressure Date of Test  
 Is an installation fitted for burning oil fuel Is the flash point of the oil to be used over 150° F.  
 Have the requirements of the Rules for the use of oil as fuel been complied with  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo If so, have the requirements of the Rules been complied with  
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with  
 Is this machinery duplicate of a previous case Yes If so, state name of vessel No. 9769. Bel. Rpt. 11099.

**General Remarks** (State quality of workmanship, opinions as to class, &c.)  
 This machinery has been constructed under special survey and in accordance with the rules. The workmanship and materials are good. It is eligible, in my opinion, to be fitted in a classed vessel and has been forwarded to Glasgow for installation  
 (Glas. Rpt. 53862)

Certificate to be sent to the Committee's Minute. The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ...	£ 4 - 0	:	When applied for,
<sup>4/5</sup> Special Repair ...	£ 51 - 4	:	7-8-19-33
<sup>1/5</sup> Donkey Boiler Fee ...	£ 75 - 16	:	555/-
Travelling Expenses (if any) £	:	:	2/107 32

*R. Lee Anness*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW** 500T1933

Assigned See Gls. Rpt. No 53862

