





32 Essential Independent Pumps (Identify by position) *General service pump +*

33 Bilge, Ballast & Oil Fuel Suction Lines, Fittings & Controls *Good*

34 Have the remaining Piping Arrangements & Fittings in the machinery space been examined as considered necessary? *Yes*

35 Fresh Water Coolers *Good*

36 Lub. Oil Coolers *Good*

37 Heaters (state service) *Good*

38 Independent Air Compressors, Coolers & Safety Devices *Good*

39 Air Receivers & Safety devices—Main *Good*

40 Oil Fuel Tanks (Not forming part of hull structure) *Good*

41 Evaporators *+*

42 Have Evaporator Safety Valves been tested under steam? *+*

43 Windlass *+*

44 Fire Extinguishing Arrangements *Good*

45 Steering Machinery *+*

46 Fire Extinguishing Arrangements *Good*

AUXILIARY ENGINES (Identify by position) *Port - good, Starboard forward - good, Starboard aft - good.*

| ELECTRICAL EQUIPMENT         |  | AUXILIARY EQUIPMENT                   |             |
|------------------------------|--|---------------------------------------|-------------|
| PROPULSION                   |  |                                       |             |
| a Generators                 |  | 1 Generators & Governors              | <i>Good</i> |
| b Exciters                   |  | 2 Motors                              | <i>Good</i> |
| c Air Coolers                |  | 3 Switchboards & Fittings             | <i>Good</i> |
| d Motors                     |  | 4 Circuit Breakers                    | <i>Good</i> |
| e Air Coolers                |  | 5 Cables                              | <i>Good</i> |
| f Control Gear, Cables, etc. |  | 6 Insulation Resistance               | <i>Good</i> |
| g Insulation Resistance      |  | 7 Steering Gear Generators and Motors | <i>Good</i> |
| h Insulating Oil Test        |  | 8 Navigation Light Indicators         | <i>Good</i> |
| i Overspeed Governors        |  |                                       |             |
| j Magnetic Couplings         |  |                                       |             |
| k Air Gap                    |  |                                       |             |

BOILERS OPENED UP & EXAMINED (Identify by position and state latest date of internal examination of each boiler)

MAIN

Superheaters

Safety Valves

Mountings, Doors & Fastenings

Safety Valves Adjusted to *Sat.*

Boiler Securing Arrangements

Main Economisers

Exhaust Gas Heated Economisers

Steam Generator Safety Valves Adjusted to

Steam Heated Steam Generators

Forced Circulating Pumps

Were Oil Burning System & Remote Controls examined working in accordance with Rules?

Funnel

Have Saturated Steam Pipes in cylindrical boiler smoke boxes been examined as required by Rules?

EXAMINATION & TESTING OF STEAM PIPES (State material)

Main

Auxiliary (over 3 in. bore)

Have Saturated Pipes in cylindrical boiler smoke boxes been tested?

Were Copper Pipes annealed?

PARTICULARS OF DEFECTS & REPAIRS, ETC. (Damage repairs should be detailed separate from wear and tear repairs; state what action has been taken regarding items which are subjects of class)

*Advancement of special survey, replacement of steam by motor machinery, alterations to windlass and steering machinery, electrical installation, pumping and piping, and fitting new propeller.*

*Now done*

*Steam main engine, including machinery, donkey and main boiler, all bilge, ballast and oil fuel suction lines and fittings removed from engine and boiler spaces.*

*Original engine settings on D.B. tanks examined and found in satisfactory condition. Original holding down bolt holes plugged.*

*Main engine, made in 1941 by Messrs. Mirreles, Bickerton and Day Ltd., Stockport, England. No. 95740/41, 6 cylinders, 14 stroke, single acting type, opened up for examination and all parts found to be in good condition.*

LEAVE THIS SPACE BLANK

Survey fees *SS £34-0-0*

Installation *50-0-0*

Damage fee *£7-15-0*

Expenses...

Date when A/c rendered

pt. 9a

Port of *MALTA*

Continuation of Report No. *2059* dated *21.9.57*

on the

motor ship *"BRITANNIA"*

*The dimensions of the crankshaft verified with the builders plans and found to be correct, i.e. Crankshaft - pins 8 3/4" diameter, journals - 9 1/4 in. diameter. (Refuse London letter (Eng) 14.5.56)*

*Crankcase explosion relief valves were fitted in accordance with drawing submitted 22.6.57 and covering letter of same date.*

*Air receivers*

*Two in no. made in 1941 by Mirreles, Bickerton and Day Ltd. Nos 2999 and 3000, working pressure - 300 lbs/sq.in., volume - 23 cu.ft. each. Was examined and tested to 600 lbs/sq.in., safety devices examined and found satisfactory. The bulk requirements for number of consecutive starts succeeded.*

*Smoking engines*

*Two in no. Diesel, 4 cylinders 4 stroke single acting, made in 1941 by Russell Newbery Ltd. Nos 3859 and 3858, 36 BHP at 1000 revs. per. min. Both engines opened up and all parts examined, found or now placed in good condition and tested on full load.*

*One in no. Diesel, air cooled, single cylinder 4 stroke single acting, made by Armstrong Siddley Ltd. No. 1E4299, 8 HP, 1200 r.p.m. All working parts examined and found in good condition. All engines tested on full load and found satisfactory.*

*General Service Pump*

*Motor driven self-priming centrifugal type. No marks visible nor data on capacity available. Pump tested under working conditions and found to be slightly below capacity when pumping from direct bilge suction. Recommended that further examination should be made at docking port. (Re letter to Naples Surveyors 9.9.57)*

*Windlass*

*Electric motor and control gear fitted. The motor was not watertight and fitted with temporary casing. The windlass was found to be unable to lift more than one anchor and cable with the generator at full load. The worm reduction gear appeared to be giving too high a speed to the gypsy shaft and overloading the motor. No further action was taken at this time to avoid delay on sailing. It was recommended that further examination should be made on arrival at Naples (Letter to Naples Surveyors 9.9.57)*

Continued Lloyd's Register Foundation



## motor ship "BRITANNIA"

### Steering gear

The original steam steering gear removed from the bridge deck and the gear, with electric motor drive, installed in the poop. The motor was arranged to drive through the original worm and wheel gear to the chain gear drum. Drawings of the control gear for the motor submitted 18.7.57. See letters - 6.8.57, 13.8.57, 23.8.57, 27.8.57, 30.8.57 and 9.9.57 regarding arrangement.

The drum type reversing switch now fitted at the bridge was found to operate satisfactorily with some slight arcing at the contacts. Prolonged tests of the gear were held and it was considered to be satisfactory for the voyage to Naples where further examination was recommended.

### Electrical installation

Plans of alterations submitted 22.7.57 and reference letters of 6.8.57, 13.8.57, 23.8.57 and 27.8.57. The electrical equipment and installation examined and tested in accordance with the requirements of the Rules and found satisfactory.

### Pumping and piping arrangements

Plans submitted 22.7.57 and new arrangements carried out in accordance with amended plans and to Rule requirements. Tests carried out satisfactorily.

### Propeller

New propeller made and supplied by Messrs. Manganese Bronze and Brass Co. Ltd. (Drawings and particulars of propeller submitted 10.4.56 and reference letters 2.4.56, 16.4.56, 26.4.56 and 14.5.56). The propeller was fitted satisfactorily whilst the ship was afloat and tested.

Propeller marked:- R.I.H. 4229 Lloyd 3.7.56 P.T.M.

### Screw and intermediate shafts

During dock trials the screw and intermediate shafts were found to be running out of alignment. The intermediate shaft was removed and all surfaces checked and found satisfactory. The screw shaft coupling face was found to be distorted and as a temporary measure alignment of the shafts was obtained by inserting liners between the coupling faces to enable the ship to proceed to the docking port without further delay. It was recommended that the shafts should be dealt with as necessary on arrival at Naples (Letter sent to Naples Surveyors 9.9.57).

