

REPORT ON STEAM TURBINE MACHINERY. No. 68124

Received at London Office 24 FEB 1944

Report 1-2-44 when handed in at Local Office 21. 2. 1944 Port of GLASSGOW

Survey held at GLASSGOW Date, First Survey 20. 9. 43 Last Survey 9. 2. 1944

in the H.M.R.T. MEDIATOR. LEITH. By whom built HENRY ROBB & CO. LD. Yard No. J11827 When built 1944

made at GLASSGOW By whom made BARCLAY CURLE & CO. LD. Engine No. VC39 When made 1944

made at By whom made Boiler No. When made

Power at Full Power Owners Port belonging to

Power as per Rule Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

for which Vessel is intended

TURBINE ENGINES, &c. Description of Engines TWO DIESEL ENGINES WITH SINGLE REDUCTION GEARING AND HYDRAULIC COUPLING

Direct coupled, single reduction geared to ONE propelling shafts. No. of primary pinions to each set of reduction gearing 2

Alternating Current Generator phase periods per second Direct Current Generator rated Kilowatts Volts at revolutions per minute;

Propelling Motors, Type. Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

Table with columns: H.P., I.P., L.P., ASTERN. Sub-columns: HEIGHT OF BLADES, DIAMETER AT TIP, NO. OF ROWS.

Revolutions per minute, at full power, of each Turbine Shaft H.P. 3020 I.P. 320 L.P. 320

Pitch Circle Diameter 1st pinion 30.8521 1st reduction wheel 2nd pinion main wheel 65.7035

Width of Face 1st reduction wheel main wheel 560 7/8

Pinion Shafts, diameter at bearings External 1st 320 7/8 2nd 200 7/8

Generator Shaft, diameter at bearings Propelling Motor Shaft, diameter at bearings

Thrust Shaft, diameter at collars 320 7/8 Tube Shaft, diameter as fitted

Bronze Liners, thickness in way of bushes as fitted

Oil Gland Is an approved Oil Gland

Can the H.P. or I.P. Turbine exhaust direct to the

Feed Pumps No. and size How driven

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

Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Independent Power Pump Direct Suctions to the Engine Room

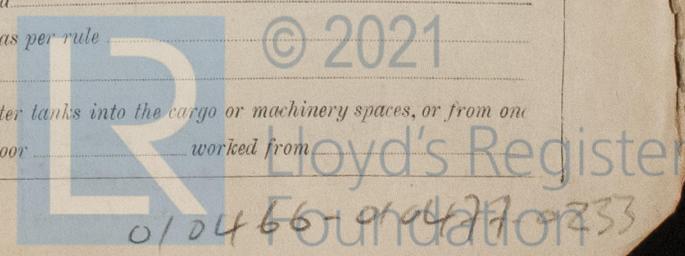
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

Are they fitted with Valves or Cocks

Are the Overboard Discharges above or below the deep water line

Are the Blow Off Cocks fitted with a spigot and brass covering plate

How are they protected Have they been tested as per rule



BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers
 Is Forced Draft fitted No. and Description of Boilers Working Pressure
 Is a Report on Main Boilers now forwarded?
 Is a Donkey an Auxiliary Boiler fitted? If so, is a report now forwarded?
 Plans. Are approved plans forwarded herewith for Shafting 22-A-41 Main Boilers Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 Superheaters General Pumping Arrangements Oil Fuel Burning Arrangements
 Spare Gear. State the articles supplied:—



For **BARCLAY, CURLE & Co., Ltd**
Alexander Macneil Manufacturer.
 Chief Draughtsman

The foregoing is a correct description,

Dates of Survey while building: During progress of work in shops— 1943 Sep 20, 24 Oct 1, 5, 11, 14, 21 Nov 2, 19, 25, 30, 1944 Jan 4, 10, 14, 27 Feb 9
 During erection on board vessel ---
 Total No. of visits 16
 Dates of Examination of principal parts—Casings Rotors Blading Gearing 14-1-44
 Wheel shaft 14-1-44 Thrust shaft 14-1-44 Intermediate shafts ✓ Tube shaft ✓ Screw shaft ✓
 Propeller ✓ Stern tube ✓ Engine and boiler seatings ✓ Engine holding down bolts ✓
 Completion of pumping arrangements: Boilers fixed ✓ Engines tried under steam ✓
 Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓
 PRIMARY WHEEL
 Rotar shaft, Material and tensile strength C.H. STEEL 32.0 TONS Identification Mark 12555 NK 7 TEST N°5
 MAIN GEAR WHEEL
 Movable Pinion Shaft, Material and tensile strength O.H. STEEL 33.6 TONS Identification Mark 12555 NK 7 TEST N°5
 Pinion shaft, Material and tensile strength S.M. STEEL 43.2 TONS 7 45.6 TONS Identification Mark 3611 NK 4 TEST N°5
 1st Reduction Wheel Shaft, Material and tensile strength ✓ Identification Mark ✓
 Wheel shaft, Material S.M. STEEL Identification Mark 12555 NK 7 TEST N°5 Thrust shaft, Material ✓ Identification Mark ✓
 Intermediate shafts, Material ✓ Identification Marks ✓ Tube shaft, Material ✓ Identification Marks ✓
 Screw shaft, Material ✓ Identification Marks ✓ 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 carrying and burning oil fuel been complied with ✓
 Is this machinery a duplicate of a previous case YES ✓ If so, state name of vessel BARCLAY CURLE VC 34 GLS. RPT. N° 66 202

General Remarks (State quality of workmanship, opinions as to class, &c.) The clutches and gearing have been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. This plant has been dispatched to berth for installation in the vessel.

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

The amount of Entry Fee	When applied for,
Special ... £ Inclusion	19
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) ... £	19

W. Russell
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 22 FEB 1944

Assigned *Refered for completion* // *See FE machy report*

FRI. 5 JAN 1945

