

REPORT ON OIL ENGINE MACHINERY.

No. 25171

10 NOV 1954

Date of writing Report To 16/6/54 28/6/1954 When handed in at Local Office 28/6/1954 Port of GREENOCK

No. in Reg. Book Survey held at GREENOCK Date, First Survey 28/5/52 Last Survey 14/6/1954 Number of Visits 53

Single on the Twin Screw vessel. **"FOUNTAINS ABBEY"** Tons Gross Net

Built at ABERDEEN By whom built HALL RUSSELL & CO., LTD. Yard No. 839 When built 1954

Engines made at GREENOCK By whom made JOHN G. KINCAID & CO., LTD. Engine No. KP5 When made 1954

Donkey Boilers made at By whom made Boiler No. When made

Brake Horse Power { Maximum 2100 Owners ASSOCIATED HUNBER LINES Port belonging to Service 480

M.N. as per Rule 480 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted YES

Trade for which vessel is intended OPEN SEA SERVICE.

OIL ENGINES, &c. — Type of Engines KINCAID-POLAR 2 or 4 stroke cycle 2 Single or double acting SINGLE

Maximum pressure in cylinders 60 KGS/CM² Diameter of cylinders 500MM Length of stroke 700MM No. of cylinders 6 No. of cranks 6

Mean Indicated Pressure 6.5 KGS/CM² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 676MM Is there a bearing between each crank YES Revolutions per minute { Maximum Service 120

Flywheel dia. 1400MM Weight 1578.8 KGS. Moment of inertia of flywheel (lb.in² or Kg.cm²) 63.284 Means of ignition COMP^d Kind of fuel used DIESEL

" " " " balance wts. (" " " ") NONE FITTED

Crank Shaft, Solid forged dia. of journals as per Rule as fitted 330MM Crank pin dia. 330MM Crank webs Mid. length breadth 635MM Thickness parallel to axis 200MM Mid. length thickness 200MM shrunk Thickness around eye-hole 108MM

Flywheel Shaft, diameter as per Rule as fitted 330MM Intermediate Shafts, diameter as per Rule as fitted 8 1/2" Thrust Shaft, diameter at collars as per Rule as fitted 350MM

Tube Shaft, diameter as per Rule as fitted 10 3/8" Is the screw shaft fitted with a continuous liner { No

Bronze Liners, thickness in way of bushes as per Rule as fitted 38MM Thickness between bushes as per Rule as fitted 38MM Is the after end of the liner made watertight in the propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

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 If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland fitted at the after end of stern tube YES If so, state type NOT KNOWN Length of bearing in Stern Bush next to and supporting propeller

Propeller, dia Pitch No. of blades Material whether moveable Total developed surface sq. feet

Moment of inertia of propeller including entrained water (lbs.in² or Kg.cm²) Kind of damper, if fitted NONE

Method of reversing Engines DIRECT Is a governor other arrangement fitted to prevent racing of the engine YES Means of lubrication FORCED Thickness of cylinder liners 38MM Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled

lagged with non-conducting material YES If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Cooling Water Pumps, No. and how driven Working F.W.

S.W. Spare F.W. S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. and capacity Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and capacity of each How driven

Is the cooling water led to the bilges If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements

Ballast Pumps, No. and capacity Power Driven Lubricating Oil Pumps, including spare pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler Branch Bilge Suctions

No. and size:—In machinery spaces In pump room

In holds, &c. Direct Bilge 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 suction in the machinery spaces 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 platform 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

What pipes pass through the bunkers How are they protected

What 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 worked from

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

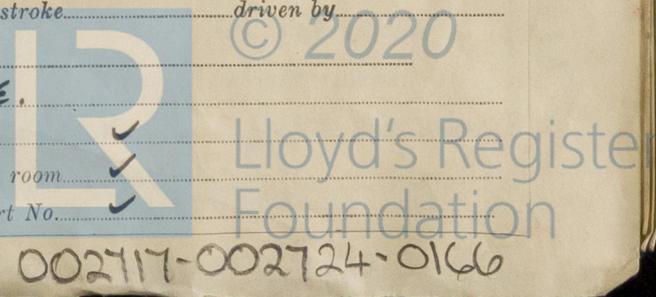
Main Air Compressors, No. No. of stages diameters stroke driven by driven by

Auxiliary Air Compressors, No. No. of stages diameters stroke driven by driven by

Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by driven by

What provision is made for first charging the air receivers Scavenging Air Pumps or Blowers, No. ONE - RING PISTON DISPLACEMENT PUMP How driven MAIN ENGINE

Auxiliary Engines Have they been made under survey Engine Nos. Position of each in engine room Report No.



AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate

State full details of safety devices.....
Can the internal surfaces of the receivers be examined and cleaned..... Is a drain fitted at the lowest part of each receiver.....

Injection Air Receivers, No..... Cubic capacity of each..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....
Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

IS A DONKEY BOILER FITTED..... If so, is a report now forwarded.....
Is the donkey boiler intended to be used for domestic purposes only.....

PLANS. Are approved plans forwarded herewith for shafting 7/3/52 (1) not, state date of approval Receivers..... Separate fuel tanks.....
Donkey boilers..... General pumping arrangements..... Pumping arrangements in machinery space.....
Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved YES Date and particulars of approval.....
SPARE GEAR.

Has the spare gear required by the Rules been supplied YES State if for "short voyages" only.....

State the principal additional spare gear supplied THE COMPLETE LIST OF SPARE GEAR SUPPLIED TO THIS VESSEL WAS FORWARDED WITH THE MACHINERY F.E. REPORT OF THE SISTER SHIP "WHITBY ABBEY"

7/3/52 (ABERDEEN OFFICE TO MESSRS HALL RUSSELL & CO. SERVICE SPEED OF 220 R.P.M. PROVISION THAT IF MINIMUM SPEED LESS THAN 60 R.P.M. NOTICE TO BE FITTED AT CON STATION STATING THAT THE ENGINE HAS NOT TO BE OPERATED CONTINUOUSLY BELOW 60 R.P.M.

For JOHN G. KINCAID & COY. LIMITED.

The foregoing is a correct description,

John G. Kincaid Chief Draughtsman.

Manufacturer.

Dates of Survey while building.....
During progress of work in shops - - (1952) MAY 28. JULY 28. AUG. 1. OCT. 2 & 29. NOV. 10. 14. 17. DEC. 3. 19. (1953) FEB. 13. 18. 25. MAR. 4. 30. APR. 8. 10. 22. JUNE 4. 7. 9. 11. 14.
During erection on board vessel - - MAY 1. 8. 11. 18. 20. 26. 27. JUNE 5. 17. AUG. 3. SEPT. 11. NOV. 12. 16. (1954) FEB. 26. MAR. 1. 3. 5. 8. 12. 31. APR. 7. 9. 14. 19. 24. 28. MAY 3. 10.

Total No. of visits 53.
Dates of examination of principal parts—Cylinders 26/2/54 to 1/3/54 Covers 3/12/52 to 10/4/53 Pistons 3/8/53 to 8/3/54 Rods 10/4/53 to 11/6/53
Crank shaft 1/5/53 Flywheel shaft INTEGRAL WITH Thrust shaft 28/3/52 to 1/5/53 Intermediate shafts Tube shaft
Screw shaft Propeller Stern tube Engine seatings Engine holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engine tried under shop conditions 9/6/54
Crank shaft, material F.S. NO. 23272A Identification mark L.R. 23272 & THRUST Flywheel shaft, material F.S. NO. 23272A Identification mark L.R. 23272
Thrust shaft, material AS FLYWHEEL SHAFT Identification mark Intermediate shafts, material Identification marks
Tube shaft, material Identification mark Screw shaft, material Identification marks
Identification marks on air receivers

Welded receivers, state Makers' Name.....
Is the flash point of the oil to be used over 150°F.....

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with.....
Full description of fire extinguishing apparatus fitted in machinery spaces.....

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.....
What is the special notation desired.....

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 "WHITBY ABBEY" GRK. REPORT NO. 25151.

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.) THE MACHINERY OF THIS VESSEL HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY IN ACCORDANCE WITH THE APPROVED PLANS AND THE RULES OF THIS SOCIETY. THE MATERIALS AND THE WORKMANSHIP ARE GOOD. THE ENGINE, TESTED ON FULL LOAD FOR 6 HOURS WITH SATISFACTORY RESULTS, HAS BEEN DESPATCHED TO ABERDEEN FOR INSTALLATION IN THE VESSEL

The amount of Entry Fee ... £ 134-0-0
Special ... £
Donkey Boiler Fee... £
Travelling Expenses (if any) £
When applied for 29th June 1954.
When received 19

H. K. Taylor.
Engineer Surveyor to Lloyd's Register of Shipping.



Committee's Minute GLASGOW 6 JUL 1954
Assigned Deferred for completion

All Is Co Ir S S S IS Is P

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