

REPORT ON OIL ENGINE MACHINERY.

No. 23304.

Date of writing Report SEPTEMBER, 1953 When handed in at Local Office SEPTEMBER, 1953 Port of LEITH Received at London Office 23 SEP 1953
 No. in Survey held at BURNTISLAND Date, First Survey 16TH JUNE, 1953 Last Survey 1TH SEPTEMBER, 1953
 Reg. Book. SUPPLEMENT on the Single Motor Screw vessel "TEESWOOD" Number of Visits TEN

Built at BURNTISLAND By whom built THE BURNTISLAND SHIPBUILDING CO., LD. Yard No. 359 When built 1953
 Engines made at GOVAN, GLASGOW By whom made BRITISH POLAR ENGINES LTD. Engine No. E.882 When made 1952
 Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
 Brake Horse Power { Maximum 800 Owners CONSTANTINE SHIPPING CO. LTD. Port belonging to MIDDLESBROUGH
 Service 740 M.N. as per Rule 160 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES
 Trade for which vessel is intended OPEN SEA SERVICE.

OIL ENGINES, &c. — Type of Engines 2 or 4 stroke cycle Single or double acting Single or double acting
 Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓
 Mean Indicated Pressure ✓ Span of bearings (i.e. distance between inner edges of bearings in way of a crank) ✓ Is there a bearing between each crank ✓ Revolutions per minute { Maximum ✓ Service ✓
 Flywheel dia. ✓ Weight ✓ Moment of inertia of flywheel (lbs. in² or Kg. cm.²) ✓ Means of ignition ✓ Kind of fuel used ✓
 Crank Shaft, { Solid forged dia. of journals ✓ Crank pin dia. ✓ Crank webs { Mid. length breadth ✓ Thickness parallel to axis ✓
 { Semi built dia. of journals ✓ Crank webs { Mid. length thickness ✓ shrunk Thickness around eyehole ✓
 { All built dia. of journals ✓ Crank webs { Mid. length thickness ✓ Thickness around eyehole ✓
 Flywheel Shaft, diameter ✓ Intermediate Shafts, diameter ✓ Thrust Shaft, diameter at collars ✓
 Tube Shaft, diameter ✓ Screw Shaft, diameter ✓ Is the { tube } shaft fitted with a continuous liner { No }
 Bronze Liners, thickness in way of bushes ✓ Thickness between bushes ✓ 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 VICKERS VISTA
 Propeller, dia. 7'-10" Pitch 4'-8" No. of blades 4 Material BRONZE whether moveable SOLID Total developed surface 21.5 sq. feet
 Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm.²) ✓ Kind of damper, if fitted ✓
 Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine ✓ Means of lubrication ✓
 Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with non-conducting material GLS. RPT. N° 80096 Are the exhaust pipes and silencers water cooled back to the engine ✓
 Cooling Water Pumps, No. and how driven 3-OFF 1-OFF MAIN ENG. 2-OFF ISLECT. MOTORS Working F.W. ONE (MAIN ENG)
 S.W. ONE Spare F.W. NIL S.W. ONE Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES
 Bilge Pumps worked from the Main Engines, No. and capacity GLS. RPT. Can one be overhauled while the other is at work ✓
 Pumps connected to the Main Bilge Line { No. and capacity of each TWO AT 60 T.P.H. How driven ELECTRIC MOTORS
 Is the cooling water led to the bilges No 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 ONE 60 T.P.H. Power Driven Lubricating Oil Pumps, including spare pump, No. and size 3-OFF 1-OFF STAND-BY AT 20 T.P.H.
 Are two independent means arranged for circulating water through the Oil Cooler YES Branch Bilge Suctions ✓
 No. and size: — In machinery spaces TWO 2 1/2" In pump room ✓
 In holds, &c. N° 1 & 2 Holds: ONE 2" P.S. N° 3 Hold: ONE 3 1/2" P.S.
 Direct Bilge Suctions to the engine room bilges, No. and size ONE 3 1/2" & ONE 4"
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES Are the bilge suction pipes 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 YES
 Are all Sea Connections fitted direct on the skin of the Ship YES Are they fitted with valves or cocks BOTH Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates NO Are the overboard discharges above or below the deep water line BELOW
 Are they each fitted with a discharge valve always accessible on the plating of the vessel YES Are the blow off cocks fitted with a spigot and brass covering plate NIL
 What pipes pass through the bunkers NONE How are they protected ✓
 What pipes pass through the deep tanks NO DEEP TANK 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 YES
 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 YES Is the shaft tunnel watertight NONE Is it fitted with a watertight door ✓ worked from ✓
 On 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. GLS. RPT. No. of stages ✓ diameters ✓ stroke ✓ driven by ✓
 Auxiliary Air Compressors, No. TWO No. of stages TWO diameters 4 1/2" & 2" stroke 1/4" driven by ELECT. MOTORS
 Small Auxiliary Air Compressors, No. ONE No. of stages ✓ diameters 6-C. FT/MIN. stroke ✓ driven by DIESEL ENG.
 What provision is made for first charging the air receivers HAND STARTING DIESEL DRIVEN AIR COMPRESSOR
 scavenging Air Pumps or Blowers, No. GLS. RPT. How driven ✓
 Auxiliary Engines ✓ Have they been made under survey YES Engine Nos. 1-OFF 60 KW SET ENGIN N° 323538 (CORSEWOOD) 2-OFF 35 KW SET ENGIN N° 349012-3
 Makers name ENGINES: RUSTON & HORNSBY LTD. GENERATORS: CAMPBELL & ISHAWOOD LTD. PROXIMITY PARKINSON LTD. Position of each in engine room 60-KW SET ON E.P. FLAT FORD STAR 35-KW SET ON E.P. FLAT AFTER STAR
 Report No. 35KW SETS NOT RPT. N° C. 16794

End 5/10/53

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..... GLASGOW..... Total cubic capacity..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

IS A DONKEY BOILER FITTED No 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..... YES..... Receivers 24-4-52 Separate fuel tanks..... YES
Donkey boilers NONE General pumping arrangements 16-12-50 Pumping arrangements in machinery space..... YES
Oil fuel burning arrangements.....
Have Torsional Vibration characteristics been approved..... GLS. RPT. Date and particulars of approval..... GLS. RPT.

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 SCREW SHAFT - C.I. PROPELLER.

For THE BURNTISLAND SHIPBUILDING CO., LTD

The foregoing is a correct description of Southwate Manufacturer.

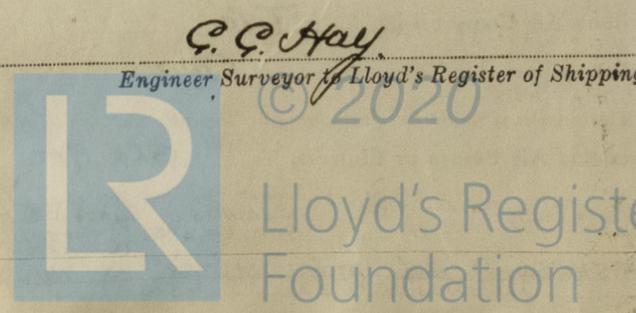
Dates of Survey while building.....
During progress of work in shops.....
During erection on board vessel.....
Total No. of visits..... 10.
Dates of examination of principal parts—Cylinders..... Covers..... Pistons..... Rods..... Connecting rods.....
Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts..... 3-7-53 Tube shaft.....
Screw shaft..... 31-3-53 Propeller..... 17-6-53 Stern tube..... 16-6-53 Engine seatings..... 19-6-53 Engine holding down bolts..... 15-7-53
Completion of fitting sea connections..... 17-6-53 Completion of pumping arrangements..... 27-8-53 Engines tried under working conditions..... 4-9-53
Crank shaft, material..... Identification mark..... Flywheel shaft, material..... Identification mark..... 7391.
Thrust shaft, material..... Identification mark..... Intermediate shafts, material..... S.M. INCO T. STEEL Identification marks..... G.H. 3-7-53
Tube shaft, material..... Identification mark..... Screw shaft, material..... S.M. INCO T. STEEL Identification mark..... G.H. 31-3-53.
Identification marks on air receivers..... GLS. RPT.

Welded receivers, state Makers' Name.....
Is the flash point of the oil to be used over 150°F..... YES
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with..... YES
Full description of fire extinguishing apparatus fitted in machinery spaces..... 2-OFF HYDRANTS WITH HOSES & NOZZLES. 2-OFF SAND BINS WITH SCOOPS. 2-OFF 10 GALL. & 2-OFF 2 GALL. FOAM TYPE EXTINGUISHERS.
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo..... No 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..... No If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.) The machinery of this vessel has been built under special survey and in accordance with the Rules and approved Plans and has been efficiently installed on board the vessel. The workmanship and materials have been found good. Upon completion, the machinery was examined under full working conditions and found satisfactory. It is recommended that the machinery of this vessel be classed in the Register Book LMC 9, 53. T.S.O.G. Oil ENGINE.

The amount of Entry Fee ... £ 32 : 0
Special ... £ : : When applied for 11/9/ 19 53.
Donkey Boiler Fee... £ : : When received 19
Travelling Expenses (if any) £ 4 : 10

Committee's Minute
Assigned + L.M.C. 9. 53 Oil Engine



8MM
14/9/53
Certificate (if required) to be sent to
(The Surveyors are required not to write on or below the space for Committee's Minute)