

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Received at London Office

Date of writing Report 19 29 When handed in at Local Office 9 19 41 Port of Glasgow
 No. in Survey held at Reg. Book. 8451 on the S.S. "Sir Leonard Pease" Date, First Survey 16 4 41 Last Survey 1 9 19 41
 (Number of Visits 22)
 Built at Burntisland By whom built Burntisland S.B. Co Ltd. Yard No. 251 When built
 Engines made at Glasgow By whom made D. Rowan & Co. Ltd. Engine No. 1086 When made 1941
 Boilers made at do By whom made do Boiler No. 1086 When made
 Registered Horse Power 184 Owners 14541 Port belonging to 14541
 Nom. Horse Power as per Rule 184 Is Refrigerating Machinery fitted for cargo purposes 14541 Is Electric Light fitted
 Trade for which Vessel is intended 14541

ENGINES, &c.—Description of Engines Triple Expansion
 Dia. of Cylinders 16 1/2 : 24 1/2 : 46 Length of Stroke 33 No. of Cylinders 3 Revs. per minute
 Crank shaft, dia. of journals as per Rule 9.167 Crank pin dia. 9 3/4 Crank webs Mid. length breadth 18 1/2 No. of Cranks 3
 as fitted 9 1/2 Mid. length thickness 6 shrunk Thickness parallel to axis 6
 Intermediate Shafts, diameter as per Rule 8.43 Thrust shaft, diameter at collars as per Rule 9.167
 as fitted 8 1/2 as fitted 9 1/2
 Tube Shafts, diameter as per Rule 9.83 Is the tube shaft fitted with a continuous liner Y/N
 as fitted 10 1/2 as fitted 10 1/2 Is the after end of the liner made watertight in the
 propeller boss Y/N 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 Y/N
 If two liners are fitted, is the shaft lapped or protected between the liners Y/N Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft Y/N Length of Bearing in Stern Bush next to and supporting propeller 3-6
 Propeller, dia. 13-2 Pitch 13-3 No. of Blades 4 Material C.I. whether Moveable No Total Developed Surface 58 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/4 Stroke 18 Can one be overhauled while the other is at work Y/N
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 Stroke 18 Can one be overhauled while the other is at work Y/N
 Feed Pumps { No. and size 10 6 x 4 1/2 x 6 Pumps connected to the { No. and size
 How driven Steam Main Bilge Line { How driven
 Ballast Pumps, No. and size 10 6 x 4 1/2 x 6 Lubricating Oil Pumps, including Spare Pump, No. and size
 Are two independent means arranged for circulating water through the Oil Cooler Y/N Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room Y/N In Holds, etc. Y/N
 In Pump Room Y/N

Main Water Circulating Pump Direct Bilge Suctions, No. and size Y/N Independent Power Pump Direct Suctions to the Engine Room Bilges, Y/N
 No. and size Y/N Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Y/N
 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 Y/N
 Are all Sea Connections fitted direct on the skin of the ship Y/N Are they fitted with Valves or Cocks Y/N
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Y/N Are the Overboard Discharges above or below the deep water line Y/N
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Y/N Are the Blow Off Cocks fitted with a spigot and brass covering plate Y/N
 What Pipes pass through the bunkers Y/N How are they protected Y/N
 What pipes pass through the deep tanks Y/N Have they been tested as per Rule Y/N
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Y/N
 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 Y/N Is the Shaft Tunnel watertight Y/N Is it fitted with a watertight door Y/N worked from Y/N

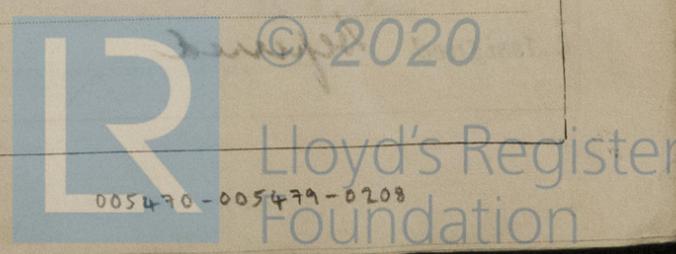
MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2450 sq
 Which Boilers are fitted with Forced Draft Main Which Boilers are fitted with Superheaters None
 No. and Description of Boilers One Single Ended Working Pressure 200 lbs
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Y/N
IS A DONKEY BOILER FITTED? Y/N If so, is a report now forwarded? Y/N
 Can the donkey boiler be used for domestic purposes only Y/N
PLANS. Are approved plans forwarded herewith for Shafting Y/N Main Boilers Y/N Auxiliary Boilers Y/N Donkey Boilers Y/N
 Superheaters Y/N General Pumping Arrangements Y/N Oil fuel Burning Piping Arrangements Y/N

SPARE GEAR.
 Has the spare gear required by the Rules been supplied Y/N
 State the principal additional spare gear supplied See List attached.

[Handwritten signatures and notes]

The foregoing is a correct description.
 For David Rowan & Co. Ltd
 Arch. N. Grierson

Manufacturer.



NOTE.—The words which do not apply should be deleted.
 5c, 938. T. (MADE IN ENGLAND.)

Rpt. 5a.
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 No. in Reg. Book.
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1941 Apr.: 16. 23 24. 28 May.: 19. 29 June.: 2. 5. 13. 24 July.: 1. 4. 7. 10. 14. 15. 16 Aug.: 4. 7. 18.

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits 12 22

Dates of Examination of principal parts—Cylinders 1.7.41 Slides 14.7.41 Covers 1.7.41
 Pistons 4.7.41 Piston Rods 10.7.41 Connecting rods 10.7.41
 Crank shaft 14.7.41 Thrust shaft 14.7.41 Intermediate shafts -
 Tube shaft Screw shaft 15.7.41 Propeller 15.7.41
 Stern tube 15.7.41 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 *SA light steel* Identification Mark *1086 74N 14.7.41* Thrust shaft material *SA light steel* Identification Mark *10549-F32-A 20.5.41-JH*
 Intermediate shafts, material - Identification Marks *F33-LD310849* Tube shaft, material - Identification Mark -
 Screw shaft, material *SA light steel* Identification Mark *10549-F32-A 20.5.41-JH* 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 *SS Ambrose Fleming of Dept No. 63510.*

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This machinery has been built under Special Survey and in accordance with the Rules. The materials and workmanship are good.
 It has been sent to Burntisland for fitting on board.
 When the machinery has been efficiently secured in position on board and satisfactorily tried under working condition it will be eligible, in my opinion for classification in the Register Book with Record of +LRC with date and notation C.L.

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

The amount of Entry Fee ... £	3 : -	When applied for,
Special	£46. 4s 7d 36 : 16	1 OCT 1941
Donkey Boiler Fee	£10 9 : 4	When received,
Travelling Expenses (if any) £	:	19

Prof. A. J. Brown
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 1 OCT 1941

Assigned *Sepered*

FRI. 17 OCT 1941

See Lib. No. 205940

