

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 7 AUG 1941

Date of writing Report 19 When handed in at Local Office 19 Port of **GLASGOW**

No. in Survey held at **GLASGOW** Date, First Survey 12.9.39 Last Survey 30.8.41
 Reg. Book. on the **S.S. "NORTON."** (Number of Visits 54)

Built at **BURNTISLAND** By whom built **BURNTISLAND SB CO. LD.** Yard No. **248** Tons { Gross Net }
 When built **1941**

Engines made at **GLASGOW** By whom made **DAVID ROWAN & CO. LD.** Engine No. **1044** When made **1941**

Boilers made at **-DO-** By whom made **-DO-** Boiler No. **1044** When made **1941**

Registered Horse Power **468** Owners Port belonging to

Nom. Horse Power as per Rule **468** Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines **TRIPLE EXPANSION** Revs. per minute

Dia. of Cylinders **22 1/2" - 36" - 65"** Length of Stroke **48"** No. of Cylinders **3** No. of Cranks **3**

Crank shaft, dia. of journals as per Rule **13.24"** Crank pin dia. **13 1/4"** Crank webs Mid. length breadth **25 7/8"** Thickness parallel to axis **8 3/8"**
 as fitted **13 1/4"** Mid. length thickness **8 3/8"** shrunk Thickness around eye-hole **5 29/32"**

Intermediate Shafts, diameter as per Rule **12.61"** Thrust shaft, diameter at collars as per Rule **13.24"**
 as fitted **12 5/8"** as fitted **13 1/4"**

Tube Shafts, diameter as per Rule **14.08"** Screw Shaft, diameter as per Rule **14 1/4"** Is the { tube } shaft fitted with a continuous liner { **Yes** }
 as fitted **14 1/4"** as fitted **14 1/4"**

Bronze Liners, thickness in way of bushes as per Rule **.73"** Thickness between bushes as per Rule **.55"** Is the after end of the liner made watertight in the propeller boss **Yes**
 as fitted **3/4"** as fitted **11/16"**

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 **Yes**

If two liners are fitted, is the shaft lapped or protected between the liners **—** Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft **No** If so, state type **—**

Length of Bearing in Stern Bush next to and supporting propeller **4' 9"**

Propeller, dia. **17' 7 1/4"** Pitch **17' 5"** No. of Blades **4** Material **CS** whether Moveable **No** Total Developed Surface **104** sq. feet

Feed Pumps worked from the Main Engines, No. **none** Diameter **—** Stroke **—** Can one be overhauled while the other is at work **—**

Bilge Pumps worked from the Main Engines, No. **2** Diameter **4"** Stroke **24"** Can one be overhauled while the other is at work **Yes**

Feed Pumps { No. and size **20 9 1/2" x 7 1/2" x 21"** Pumps connected to the { No. and size }
 How driven **Steam** Main Bilge Line { How driven }

Ballast Pumps, No. and size **20 9" x 12" x 12"** Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler **—** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room

In Pump Room **—** In Holds, &c. **—**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **Independent Power Pump Direct 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 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

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 stokehold 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 **—**

MAIN BOILERS, &c.— (Letter for record **S**) Total Heating Surface of Boilers **5322** Φ Main **1556** Φ aux. **Total 6878**

Which Boilers are fitted with Forced Draft **Main & aux.** Which Boilers are fitted with Superheaters **none**

No. and Description of Boilers **2 SE main 1-SE aux.** Working Pressure **220 lb.**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**

IS A DONKEY BOILER FITTED? **No** If so, is a report now forwarded? **—**

Can the donkey boiler be used for domestic purposes only **—**

PLANS. Are approved plans forwarded herewith for Shafting **25/10/40** Main Boilers **31/10/40** Auxiliary Boilers **24/4/41** Donkey Boilers **—**
 (If not state date of approval)

Superheaters **—** General Pumping Arrangements **—** Oil fuel Burning Piping Arrangements **—**

SPARE GEAR.

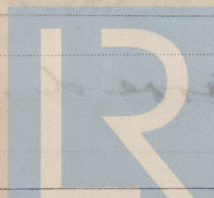
Has the spare gear required by the Rules been supplied **Yes**

State the principal additional spare gear supplied **List attached**

The foregoing is a correct description.

For David Rowan & Co. Ltd.
 Archd. N. Grierson

Manufacturer.



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Lloyd's Register

Foundation

010466-010477-1407

15140

(28-402-31) [unclear]

1939 Sep: 12 (1940 Nov: 4. 7. 14. 18 Dec: 24. 27 (1941 Jan: 13. 23. 31 Feb: 4. 14. 19. 21. 25
During progress of work in shops - -
Mar: 4. 11. 17. 24. 31 Apr: 17. 23. 24. 29. 30 May 2. 7. 12. 13. 14. 19. 21. 22. 23. 29 June: 2. 6. 9. 10. 11
During erection on board vessel - - -
13. 17. 19. 24. 25. 30 July 1. 2. 4. 9. 11. 15. 18. 30
Total No. of visits 54

Dates of Examination of principal parts—Cylinders 14-5-41 Slides 19-6-41 Covers 14-5-41
Pistons 19-6-41 Piston Rods 19-6-41 Connecting rods 29-4-41
Crank shaft 12-6-41 Thrust shaft 13-5-41 Intermediate shafts 30-4-41
Tube shaft — Screw shaft 10-6-41 Propeller 10-6-41
Stern tube 6-6-41 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 SM Steel Identification Mark 10215 ATB Thrust shaft material SM Steel Identification Mark 10215 ATB
Intermediate shafts, material SM Steel Identification Marks 10215 ATB Tube shaft, material — Identification Mark —
Screw shaft, material SM Steel Identification Mark 8695 ATB Steam Pipes, material steel Test pressure 660 lb Date of Test July, 1941
Is an installation fitted for burning oil fuel No 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 "MERTON" GLS. RPT 63981

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. In my opinion, it will be eligible to be classed in the Register Book with record + LMC with date when satisfactorily installed in vessel and upon completion of trials.

The machinery has been sent to Burntisland and the Leith Surveyors have been advised.

Rob
4/8/41

GLASGOW (On Completion)

The amount of Entry Fee ...	£ 5 : - :	When applied for,
4/5 Special ...	£ 76 : 3 :	5 AUG 1941
Donkey Boiler Fee ...	£ : : :	When received,
1/5 LEITH R/C ...	£ 19 : 1 :	19.
Travelling Expenses (if any) £	: : :	

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 5 AUG 1941

Assigned. Deferred.

FRI. 12 SEP 1941



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