

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 6 JUN 1946

Date of writing Report 19 When handed in at Local Office 3 June 1946 Port of Sunderland

No. in Survey held at Sunderland Date, First Survey 19 Dec. 45 Last Survey 30<sup>th</sup> May 1946  
Reg. Book. " GALEOMMA " (Number of Visits 94)

Built at Sunderland By whom built J.L. Thompson & Sons L<sup>o</sup> Yard No. 643 Tons { Gross 5072  
Net 2432  
When built 1946.

Engines made at Sunderland By whom made G. Clark (1938) L<sup>o</sup> Engine No. 1384 When made 1946.  
Boilers made at Renfrew & Greenock By whom made Baber & White & J. K. Caird Boiler No. 1838 A 18 When made 1946.

Registered Horse Power Owners N.Y. Lussenoche Schepvaart Maats. Port belonging to Willemslad.  
Nom. Horse Power as per Rule 430 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

Trade for which Vessel is intended Tanker.

ENGINES, &c.—Description of Engines Twin screw triple expansion. Revs. per minute  
Dia. of Cylinders 21 1/2" - 36" - 61" Length of Stroke 39" No. of Cylinders 6 No. of Cranks 6  
Crank shaft, dia. of journals as per Rule 11.959" Crank pin dia. 12 3/4" Crank webs Mid. length breadth 1'-9" Thickness parallel to axis HP. MP. 8" shrunk  
as fitted 12 3/4" Mid. length thickness LP. 8 1/4" Thickness around eye Journal 5 5/8"  
Intermediate Shafts, diameter as per Rule 11.39" Thrust shaft, diameter at collars as per Rule 11.959"  
as fitted 12 3/4" as fitted 12 3/4"  
Tube Shafts, diameter as per Rule 12.55" Is the { tube } shaft fitted with a continuous liner { Yes }  
as fitted 12 7/8" as fitted 12 7/8" as fitted { screw }

Bronze Liners, thickness in way of bushes as per Rule 23/32" Thickness between bushes as fitted 17/32" Is the after end of the liner made watertight in the  
propeller boss Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner one length.

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 or other appliance fitted at the after end of the tube  
shaft Yes If so, state type Newark

Propeller, dia. 14'-0" Pitch 13.42-15.86' No. of Blades 4 Material Bronze whether Moveable No. Total Developed Surface 42.4 sq. feet  
Length of Bearing in Stern Bush next to and supporting propeller 4'-11 3/8"

Feed Pumps worked from the Main Engines, No. none Diameter 7/8" Stroke 6 1/4" Can one be overhauled while the other is at work Yes  
Bilge Pumps worked from the Main Engines, No. Two Diameter 4 1/2" Stroke 6 1/4" Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size Two 10" x 13 1/2" = 24" Pumps connected to the { No. and size Ballast Pumps + 2 main engine pumps.  
How driven Steam Main Bilge Line { How driven Steam

Ballast Pumps, No. and size 1 @ 10" 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 1 aft in ER @ 3", 2 @ 3" in Bl. Rm.  
In Pump Room 1 @ 3" In Holds, &c. (Tanker.)

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 11" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
No. and size 1 @ 4" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes

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 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 stokehold plates Yes 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 Yes

That Pipes pass through the bunkers none How are they protected -  
That pipes pass through the deep tanks none 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 (Tanker) Is the Shaft Tunnel watertight none Is it fitted with a watertight door - worked from -

MAIN BOILERS, &c.—(Letter for record W.T.) Total Heating Surface of Boilers 10640 sq  
Which Boilers are fitted with Forced Draft Both Which Boilers are fitted with Superheaters none

No. and Description of Boilers 2 W.T. Working Pressure 220 lbs/sq"  
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 no

PLANS. Are approved plans forwarded herewith for Shafting 12/13/45 Main Boilers no Auxiliary Boilers - Donkey Boilers -  
(If not state date of approval) Mbo 31/1/45 (CRANK) Prototype EW 1158 1158  
Superheaters - General Pumping Arrangements Retained for Sinter Vessel Oil fuel Burning Piping Arrangements Retained for Sinter Vessel

SPARE GEAR.  
Was the spare gear required by the Rules been supplied Yes

Date the principal additional spare gear supplied 2 C. 1. Propellers (one right & one left handed), 1 Prop. Shaft, 1 Sec. Shaft  
Sheave with bolts & nuts, 1 Guide shoe with bolts, 1 Complete set piston packing rings & springs for  
one engine, 1 piston rod, 1 pair top end bearings, 1 pair bottom end bearings, 1 Spill valve spindle  
slide block, 1 bilge pump plunger for M.S., 1 set bilge pump valves & seats, 2 both end ball & nuts  
2 main bearing bolts & nuts, 4 top end bolts & nuts, 1 set coupling bolts & nuts, 1 set metallic packing  
bearing parts for each piston rod & valve spindle for one engine, 1 set valves, guards & springs for  
one main fuel pump, ditto for aux. fuel pump & ballast pump, General service pump & swap.  
feed pump, Impeller & shaft for Circ. Pump, Eight air heater tubes, 8 large & 14 small tubes for  
boilers, 12 handhole fittings for headers, 2 Safety Valve Springs &c. &c.

The foregoing is a correct description.

Archd. J. Perry, Manufacturer.  
DIRECTOR & GENERAL MANAGER.

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1945. Sep. 19. Oct. 5, 12, 15, 17, 22, 26. Nov. 1, 5, 7, 8, 9, 12, 13, 15, 19, 21, 22, 24, 27, 30. Dec. 4, 6, 7, 10, 11, 12, 17, 20, 21, 27  
 During progress of work in shops - -  
 1946. Jan. 4, 7, 8, 9, 10, 11, 15, 16, 17, 18, 21, 22, 23, 24, 25, 28, 30, 31. Feb. 4, 7, 8, 11, 18, 19, 20, 22, 25, 26, 27, 28  
 During erection on board vessel - - -  
 Mar. 1, 4, 7, 8, 11, 12, 13, 18, 19, 20, 21, 22, 25, 27. Apr. 1, 4, 9, 10, 12, 17, 18, 22, 25, 26, 29. May 2, 1, 6, 8, 10, 22, 30  
 Total No. of visits 94

Dates of Examination of principal parts - Cylinders: HP 7/12/45, MP 27/12/45, LP 4/12/45  
 Slides 11/2/46  
 Covers 20 Cyls.  
 Pistons 15/1/46 Piston Rods 9/11/45 4/1/46 Connecting rods P. 4/1/46 S. 18/1/46  
 Crank shaft PORT 21/11/45 ST. 10/12/45 Thrust shaft 9/11/45 Intermediate shafts 18/1/46  
 Tube shaft - Screw shaft P. 27/11/45 S. 6/12/45 Propeller P. 19/2/46 S. 25/2/46  
 Stern tube P. 31/12/45 S. 9/1/46 Engine and boiler seatings 20/2/46 Engines holding down bolts 25/4/46  
 Completion of fitting sea connections 16/1/46  
 Completion of pumping arrangements 21/5/46 Boilers fixed 27/2/46 Engines tried under steam 10/5/46 & 30/5/46  
 Main boiler safety valves adjusted 10/5/46 Thickness of adjusting washers P. Blw. P. 7/16" S. 7/16" St. Blw. P. 7/16" S. 7/16"  
 Crank shaft material Ingot Steel Identification Mark S.D. No. 1384A HNF 21/1/45 Thrust shaft material Ingot Steel Identification Mark P. No. 5916 HNF 27/11/45  
 Intermediate shafts, material Ingot Steel Identification Mark S.D. No. 6094 HNF 18/1/46 Tube shaft, material - Identification Mark -  
 Screw shaft, material Ingot Steel Identification Mark S. No. 5914 HNF 6/12/45 Steam Pipes, material S.D. Steel Test pressure 660 lb Date of Test 17/4/46  
 Is an installation fitted for burning oil fuel Yes. Is the flash point of the oil to be used over 150°F. Yes.  
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes.  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo (Tanker) 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 Not desired.  
 Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been built under Special Survey in accordance with the approved Plans & the rules of the Society. The materials & workmanship are good. It has been securely fitted on board the vessel & stood under working conditions alongside quay & at sea with satisfactory results.

The boilers (as per Census Rpt. No. 23261) have been erected & completed on board, tested by hydraulic pressure of 300 lbs. & found tight & sound at that pressure, fitted to burn oil fuel (F.P. above 150°F), Section 2 of the rules has been complied with & safety valves adjusted to working pressure in accordance with rule requirements.

The machinery is now eligible in my opinion to have notation  $\frac{1}{2}$  LMC. 5. 46, T.S. (CL), 2 N.T. 220 lbs. fitted to burn oil fuel (F.P. above 150°F) 5. 46.

SUNDERLAND. Certificate to be sent to

The amount of Entry Fee ... £ 6 : : When applied for,  
 3/5 Special ... £ 66 : 18 : 4 JUN 1946  
 Donkey Boiler Fee ... £ : : When received,  
 Travelling Expenses (if any) £ : : 19

*J. H. Brown*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRL 5 JUL 1946  
 Assigned + LMC 5, 46.  
 FITTED FOR OIL FUEL 5, 46 FLASH POINT ABOVE 150°F. F.D. C.L. O.G. 2 WTB 220 lb.

