

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 18-1-1944 When handed in at Local Office *Jarmouth* Port of *Sp Suich*
 No. in Survey held at *Jarmouth* Date, First Survey *17 May 1943* Last Survey *18-1-1944*
 Reg. Book *4275* on the *SS "Vio 31"* (Number of Visits *Final*)
 Built at *Jarmouth* By whom built *Isaac Pimlott & Son Ltd.* Yard No. *654* Tons *657* Gross *1944* Net
 Engines made at *Jarmouth* By whom made *Peabody (1931) Ltd.* Engine No. *646* When made *1944*
 Boilers made at *Annan* By whom made *Cochran & Co* Boiler No. *XT-1148* When made *1943*
 Registered Horse Power *6.9* Owners *T.P. Abdul Rahuman & Co* Port belonging to *Colombo*
 Nom. Horse Power as per Rule *6.9* Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
 Trade for which vessel is intended

ENGINES, &c.—Description of Engines *Compound Reciprocating*
 Dia. of Cylinders *10 1/2" — 22"* Length of Stroke *14"* No. of Cylinders *Two* Revs. per minute *150*
 Crank shaft, dia. of journals *as per Rule app. 4 3/8" 4 1/3" for small valve* No. of Cranks *Two*
 as fitted *4 3/8"* Crank pin dia. *4 3/8"* Crank webs *shrunk* Thickness parallel to axis *2 7/8"*
 Intermediate Shafts, diameter *as per Rule 3.93 for small valve* Mid. length thickness *shrunk* Thickness around eye-hole *2"*
 as fitted *3.93* Thrust shaft, diameter at collars *as per Rule 4.26*
 Tube Shafts, diameter *as per Rule* as fitted *4 3/8"*
 Screw Shaft, diameter *as per Rule app. 4 7/8" 4 5/9"* Is the *{ tube }* shaft fitted with a continuous liner
 as fitted *4 7/8"* *{ screw }*
 Bronze Liners, thickness in way of bushes *as per Rule* Thickness between bushes *as per Rule* Is the after end of the liner made watertight in the
 as fitted *as fitted* 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 or other appliance fitted at the after end of the tube
 at *as fitted* If so, state type *as fitted*
 Propeller, dia. *66"* Pitch *86"* No. of Blades *4* Material *C.I.* Length of Bearing in Stern Bush next to and supporting propeller *20"*
 whether Moveable *no* Total Developed Surface *11.6* sq. feet
 Feed Pumps worked from the Main Engines, No. *One* Diameter *2 1/8"* Stroke *6"* Can one be overhauled while the other is at work
 Bilge Pumps worked from the Main Engines, No. *One* Diameter *2 1/8"* Stroke *6"* Can one be overhauled while the other is at work
 Feed Pumps *No. and size* Pumps connected to the *{ No. and size }*
{ How driven } Main Bilge Line *{ How driven }*
 Ballast Pumps, No. and size *Lubricating Oil Pumps, including Spare Pump, No. and size*
 Are two independent means arranged for circulating water through the Oil Cooler
 Bilge Pumps:—In Engine and Boiler Room *Suctions, connected to both Main Bilge Pumps and Auxiliary*
 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 *Specification*) Total Heating Surface of Boilers *SPARE GEAR.*
 Which Boilers are fitted with Forced Draft *Which Boilers are fitted with Superheaters.*
 No. and Description of Boilers *Working Pressure.*
 IS A REPORT ON MAIN BOILERS NOW FORWARDED?
 IS A DONKEY BOILER FITTED? 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 *28-10-41* Main Boilers Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements
 as the spare gear required by the Rules been supplied *Yes.*
 state the principal additional spare gear supplied *Specification*

The foregoing is a correct description.

A. Smith Manufacturer.



17.5.43, 18.6.43, 1.7.43, 24.9.43, 10.11.43, 15.12.43

During progress of work in shops - - { 6-9-43, 21-10-43, 18-11-43, 22-11-43, 18-1-44.

Dates of Survey while building {

During erection on board vessel - - - {

Total No. of visits Eleven (11)

Dates of Examination of principal parts—Cylinders 6-9-43, 21-10-43 Slides 6-9-43 Covers 21-10-43

Pistons 21-10-43 Piston Rods 18-11-43 Connecting rods 18-11-43

Crank shaft 6-9-43 Thrust shaft 6-9-43 Intermediate shafts ✓

Tube shaft ✓ Screw shaft 18-1-44 Propeller 18-1-44

Stern tube 18-1-44 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 Steel Identification Mark ✓ Thrust shaft material Steel Identification Mark ✓

Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material C.I. Identification Mark ✓

Screw shaft, material Steel Identification Mark ✓ Steam Pipes, material ✓ 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. No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. BROWNS T. 413.

The machinery has not been constructed in accordance with the requirements of the Society's Rules but has been constructed under the supervision of the Society.

The scantlings are in accordance with the Society's Rules. The workmanship is of good description.

The machinery & boiler fitted on board in accordance with the approved specification.

Full power basin trials held with satisfactory results

W. Reed
Liverpool 25/5/44

LIV

Install - fee 6-16-0

The amount of Entry Fee	£	:	:	When applied for,
Special	£	8	0	0
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	1	5	6

W. Reed
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 13 OCT 1900

Assigned not for Classing Committee



2 DEC 1900

Date of survey

No. in Reg. Book

Built at

Boilers made by

Owners

VERT

Made at

tested by

No. of sails

enter the

Range of

drilled

rules

furnace

pressure

crown plate

plates

Diameter

External

Working

ring

Dates of Survey while building

GENERAL

The

The

the

a

a

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

Sum

Tra

Comm

Assig

Certificate to be sent to

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

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