

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office AUG - 5 1940

of writing Report 19 When handed in at Local Office **ADG 1940** 19 Port of **HULL**

in Survey held at **FANDANGO** Date, First Survey **5.1.40** Last Survey **16.7.1940**
G. Book. (Number of Visits **35**) Tons { Gross **452** Net **144**

uilt at **Selby** By whom built **Cochrane & Sons Ltd** Yard No. **1214** When built **1940-7**
Engines made at **Hull** By whom made **Amos & Smith Ltd** Engine No. **674** When made **do**

ilers made at **do** By whom made **do** Boiler No. **do** When made **do**
egistered Horse Power **✓** Owners **HR Admiralty** Port belonging to **do**

om. Horse Power as per Rule **156** Is Refrigerating Machinery fitted for cargo purposes **✓** Is Electric Light fitted **Yes**
ade for which Vessel is intended **✓**

GINES, &c.—Description of Engines **Triple Expansion** Revs. per minute **160**
ia. of Cylinders **12-23-38** Length of Stroke **27** No. of Cylinders **3** No. of Cranks **3**

runk shaft, dia. of journals as per Rule **7.5** Crank pin dia. **7 7/8** Crank webs Mid. length breadth **✓** Thickness parallel to axis **4 13/16**
as fitted **7 7/8** Mid. length thickness **✓** shrunk Thickness around eye-hole **3 1/16**

ntermediate Shafts, diameter as per Rule **7.15** Thrust shaft, diameter at collars as per Rule **7.5**
as fitted **7 1/4** as fitted **7 7/8**

ube Shafts, diameter as per Rule **8.2** Is the { tube } shaft fitted with a continuous liner {
as fitted **8 1/4** as fitted **8 1/4** screw }

ronze 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 **✓** as fitted **✓**

ropeller 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

haft **Yes** If so, state type **Newark** Length of Bearing in Stern Bush next to and supporting propeller **36 1/2**
Propeller, dia. **102** Pitch **11-0** No. of Blades **3** Material **C.1** whether Moveable **No** Total Developed Surface **24** sq. feet

eed Pumps worked from the Main Engines, No. **2** Diameter **2 1/2** Stroke **15** Can one be overhauled while the other is at work **Yes**
Bilge Pumps worked from the Main Engines, No. **2** Diameter **2 1/2** Stroke **15** Can one be overhauled while the other is at work **Yes**

eed Pumps { No. and size **One 4+6+12 Weirs** Pumps connected to the { No. and size **One 6+5+15 Weirs** }
How driven **Independent Steam** Main Bilge Line How driven **Independent Steam** Downlin

Ballast Pumps, No. and size **None** Lubricating Oil Pumps, including Spare Pump, No. and size **None**
Are two independent means arranged for circulating water through the Oil Cooler **None** Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room **Eng Room 2 @ 2" dia + one @ 2 3/4" dia** Stoheld **2 @ 2" dia**
In Pump Room **None** In Holds, &c. **One @ 2" dia in each of the following, Forepeak, Main Water Circulating Pump Direct Bilge Suctions, No. and size **One - 5"** Independent Power Pump Direct Suctions to the Engine Room Bilges,**

No. and size **One @ 2 3/4" included above** 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 **Yes**
Are they fixed sufficiently high on the ship's side to be seen without lifting the stowhold plates **Yes** Are the Overboard Discharges above or below the deep water line **Above**

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 **No**
What Pipes pass through the bunkers **Feed Tank Suctions** How are they protected **Wood casing**

What pipes pass through the deep tanks **None** Have they been tested as per Rule **✓**
Are all Pips, 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 ^{space} **space** watertight **Yes** Is it fitted with a watertight door **No** **Access from Hatch above**

MAIN BOILERS, &c.—(Letter for record **S**) Total Heating Surface of Boilers **2650**
Is Forced Draft fitted **Yes** No. and Description of Boilers **One S.B.** Working Pressure **200 lbs/0"**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**
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 **17/10/39** Main Boilers **17/10/39** Auxiliary Boilers **None** Donkey Boilers **None**
(If not state date of approval)
Superheaters **None** General Pumping Arrangements **17/10/39** Oil fuel Burning Piping Arrangements **None**

SPARE GEAR.
Has the spare gear required by the Rules been supplied **Yes**
State the principal additional spare gear supplied **See attached list**

The foregoing is a correct description.
For AMOS & SMITH LTD.

A.R. Bradley
DIRECTOR

Manufacturer.



Date of writing

No. in Reg. Book

Built at

Engines made

Boilers made

Nominal H.P.

MULTITUBULAR

Manufacturers

Total Heating

No. and Desc

Tested by hyd

Area of Fire

Area of each

In case of don

Smallest dist

Smallest dist

Largest inter

Thickness

long. seams

Percentage of

Percentage of

Thickness of

Material

Length of pl

Dimensions of

End plates in

How are stay

Tube plates:

Mean pitch o

Girders to co

at centre 8

in each

Tensile stren

Pitch of stay

Front plate

Thickness

Pitch of stay

Main stays:

Diameter { At

Screw stays

Diameter { At

Ove

1940 Jan. 5, 7, 25, 26, 31 Feb. 7, 9, 19, 26, Mar. 1, 4, 7, 23, 29.
 Apr. 9, 11, 25, May 2, 9, 10, 23, 25, 30, 31, June 4, 7, 28.
 July 2, 3, 5, 6, 8, 9, 11, 16.
 Total No. of visits 35

FANDANGO

Dates of Examination of principal parts—Cylinders 9 2.40 L.P. 7.140 M.P. Slides 25.4.40 Covers 25.4.40.
 Pistons 25.4.40 Piston Rods 25.4.40 Connecting rods 25.4.40.
 Crank shaft 2.5.40 Thrust shaft 2.5.40 Intermediate shafts 2.5.40
 Tube shaft ✓ Screw shaft 26.2.40 Propeller 23/3/40
 Stern tube 4.23/3/40 Engine and boiler seatings 23/3/40 Engines holding down bolts 28/6/40
 Completion of fitting sea connections 23/3/40
 Completion of pumping arrangements 2.7.40 Boilers fixed 28/6/40 Engines tried under steam 11.7.40
 Main boiler safety valves adjusted 2.7.40 Thickness of adjusting washers P 3/8" S. 13/32
 Crank shaft material Steel Identification Mark 721 L.T. 5.1.40 Thrust shaft material Steel Identification Mark 256 E.H. CSP 5.3.40
 Intermediate shafts, material Steel Identification Marks 721 } L.T. 5.1.40 Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material Steel Identification Mark 720 L.T. 5.1.40 Steam Pipes, material Steel Test pressure 600 lbs/sq Date of Test 28.6.40
 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 No 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 H.M.S. BIRCH Hel Rpt No. 50672
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this vessel has been constructed & fitted on board in accordance with the approved Admiralty plans, The specification of the Society's Rules. The workmanship & materials are good & when tried under full working conditions at sea, it was found satisfactory in every respect. An I.H.P. of 867 @ 154 R.P.M. was obtained.

This Vessel is eligible, in my opinion, when classed to have the records of L.M.C. 7.40 & O.G. & the notation T. 3cy. 13 1/2, 23 + 38 156 N.H.P. 200 LB. 15B. 3CF. G.S. 63 H.S. 2650 IMP.D.

The Vessel has been classed under the Society's Supervision

Digby J. Collins
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ : : When applied for,
 Special Inclusion ... £ 90 : 0 : 2 AUG 1940
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : 3-10 1940

TUE 13 AUG 1940

Committee's Minute
 Assigned Lamb 7.40
 J.D., O.P.



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