

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

AUG -5 1940

of writing Report

19

When handed in at Local Office

Port of **HULL**

in Survey held at
g. Book.

on the **H.M.S. FANDANGO**

uilt at **Selby**

By whom built **Cochrane & Sons Ltd**

Yard No. **1214**

Tons { Gross **452**
Net **144**

When built **1940-7**

Engines made at **Hull**

By whom made **Amos & Smith Ltd**

Engine No. **674**

When made **do**

Boilers made at **do**

By whom made **do**

Boiler No. **do**

When made **do**

Registered Horse Power **✓**

Owners **JR Admiralty**

Port belonging to

nom. 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**

dia. of Cylinders **12 1/2 - 23 - 38**

Length of Stroke **27**

No. of Cylinders **3**

No. of Cranks **3**

rank shaft, dia. of journals **as per Rule 7.5"**

as fitted **7 7/8"**

Crank pin dia. **7 7/8"**

Crank webs

Mid. length breadth **✓**

Thickness parallel to axis **4 13/16"**

Mid. length thickness **✓**

Thickness around eye-hole **3 7/16"**

Intermediate Shafts, diameter **as per Rule 7.15"**

as fitted **7 1/4"**

Thrust shaft, diameter at collars **as per Rule 7.5"**

as fitted **7 7/8"**

Tube Shafts, diameter **as per Rule 8.2"**

as fitted **8 1/4"**

Screw Shaft, diameter **as per Rule 8.2"**

as fitted **8 1/4"**

Is the { tube } shaft fitted with a continuous liner { **✓**

bronze Liners, thickness in way of bushes **as per Rule**

as fitted

Thickness between bushes **as per Rule**

as fitted

Is the after end of the liner made watertight in the

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

shaft **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.I**

whether Moveable **No**

Total Developed Surface **24** sq. feet

Feed 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**

Feed Pumps { No. and size **One 4+6+12 Weirs**

How driven **Independent Steam**

Pumps connected to the Main Bilge Line

No. and size **One 6+5+15" Weirs**

How driven **Independent Steam**

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 1/4" dia**

Stokehold 2 @ 2" dia

In Pump Room **None**

In Holds, &c. **One @ 2" dia in each of the following, Forepeak**

Blain Pouch, Radio space, Magazine, Spirit Room, Bunker, Shaft space & 8 ft Peak

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 1/4" 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 stokehold 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 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 **Yes**

Is the Shaft **space** watertight **Yes**

Is it fitted with a watertight door **No**

Access from 8 ft Peak 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/sq. in.**

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**

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. Trevelyan
DIRECTOR

Manufacturer.



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Lloyd's Register
Foundation

1940 Jan. 5. 7. 25. 26. 30 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.

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits 35

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 856 E.H. CSP
 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 Rht 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 M.F.D.

The Vessel has been classed under the Society's Supervision

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

Committee's Minute

Assigned

7. 40
 20. 09

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



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Lloyd's Register
 Foundation

No. in Sure
 Reg. Book.

Built at

Engines made

Boilers made

Nominal H.P.

MULTITU

Manufacturers

Total Heating

No. and Desc

Tested by hy

Area of Fire

Area of each

In case of don

Smallest dista

Smallest dista

Largest inter

Thickness

long. seams

Percentage of

Percentage of

Thickness of

Material

Length of pla

Dimensions of

End plates in

How are stay

Tube plates:

Mean pitch of

Girders to co

at centre 8

in each

Tensile stren

Pitch of stays

Front plate

Thickness

Pitch of stay

Main stays:

Diameter { At

Screw stays

Diameter { At

Over