

Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office

NEWCASTLE-on-TYNE.

Date of writing Report 19 When handed in at Local Office 14/8/41 Port of Newcastle-on-Tyne

No. in Reg. Book. Survey held at Newcastle on Tyne Date, First Survey 22/4/41 Last Survey 8th/8/1941

6047 on the Machinery of the Wood, Iron or Steel 5/5 "HOPESTAR" (No. of Visits 45)

Tonnage { Gross 5267
Net 3192 Vessel built at Newcastle By whom Swan, Hunter & Wigham Richardson Ltd When 1936 - 2.

Nominal Horse Power 400 Engines made at Wallsend By whom Parsons Marine Steam Turb. Co. Ltd When 1936 - 2.

No. of Main Boilers 2 (58) Owners Wallsend Shipping Co. Ltd (Donkey) 1936.

No. of Donkey Boilers 1 Managers Stott, Mann, & Fleming Ltd Owners' Address (if not already recorded in Appendix to Register Book.)

Steam Pressure in Main Boilers 285 lb Port Newcastle Voyage

in Donkey Boilers 120 lb # Surveyed Afloat & in Dry Dock Swan Hunter & W.R. Dry Dock.

(State name of Dock.)

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Last Report No. Port

Particulars of Examination and Repairs (if any) Damage & LMC.

(Periodical surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of repairs, if any, and, in detail, the nature and extent of examinations and subsequent repairs. Repairs on account of damage (the cause of which must be stated) should be separated from repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case.)

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined not required

Was a damage report made by anyone else? If so, by whom? Yes Underwriters' Surveyors.

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes

" " Donkey " " " Yes

If this was not done, state for what reasons? ✓

And what parts of the Boilers could not be thus thoroughly examined? ✓

Also what special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? ✓

State latest date of internal examination of each boiler Both main Bldrs 3/7/41.

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes

To what pressure were they afterwards adjusted under steam? 285 lb

Did the Surveyor examine the Safety Valves of Donkey Boiler? Yes

To what pressure were they afterwards adjusted under steam? 120 lb

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes

, and of the Donkey Boiler? Yes

Did the Surveyor examine the drain plugs of the Main Boilers? None

, and of the Donkey Boiler? None

Did the Surveyor examine all the mountings of the Main Boilers? Yes

, and of the Donkey Boiler? Yes

Has screw shaft now been drawn and examined? Yes Is it fitted with continuous liner? Yes

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? No

Has shaft now been changed? No If so, state reasons ✓

Has the shaft now fitted been previously used? ✓ Has it a continuous liner? ✓

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? ✓

State date of examination of Screw Shaft 14/7/41 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft 1/8"

Engine parts, when referred to by numbers, should be counted from forward.

Is electric light and/or power fitted? Yes

If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete.

Now done: - (1) Examination on 9/8 of damage stated to have been caused by grounding at Belfast Lough, on 6th Dec 1940. See also Belfast Rpts 12905 & 12932 of Feb Mar 1941

Vessel placed in dry dock. Propeller, stern bush, Screw shaft drawing, sea connections & their shell fastenings examined and found or placed in good condition.

The machinery was opened up, the Steam Turbines (HP & LP), with Rotors lifted, D.R. gearing with its shafting, Thrust & intermediate shafting, main & auxiliary Condensers, pumps, piping & pumping arrangements examined and found or now placed in good condition.

The Steam pipes, main & auxiliary lines, all of S.D. Steel, were tested to twice W.P. in place, except the Steam pipes at the Turbines which were removed for access and were tested in the work.

The machinery was afterwards examined under working conditions with vessel moored at quay & all found satisfactory P.T.O.

General Observations, Opinion, and Recommendation:—

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, E.S. 9, 11, B.M.S. 9, 11, & L.M.C. 9, 11, or L.M.C. 140 lb., E.D., &c.)

CS 2, 3, 4,

The machinery of this vessel is in good safe working condition, eligible in my opinion to remain as classed and to have record + LMC 8.H.1, TSc. 7.41.

Licence case

Survey Fee (per Section 29) LMC £13.0.0 Fees applied for 14 AUG 1941

Etc. Install. £9.9.0

Special Damage & Repair Fee (if any) £5.5.0

Spec. Wear & Tear repairs

Travelling expenses (if chargeable)

Form R.H.1 attached Rpt 8.

Received by me, 10

Committee's Minute

Assigned

+ LMC 8.41

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

W1013-0259 1/2

Insert Character of Ship and Machinery precisely as in the Register Book

Subject to the DONKEY BOILER

Machinery of S/S HOPESTAR

Now done, conts. (2) L.M.C.

In addition to the items reported overleaf on 9/2 g Grounding

The Electric Installation was examined — see page 3.

The 2 main Boilers with Superheaters & de-superheaters, and the Donkey Boiler, were examined internally & externally, together with doors, mountings & safety valves, found or placed in good condition, and the safety valves were afterwards adjusted under steam as stated on page 1.

Repairs due to damage:

on S. side

The Cast iron injection Valve chest for Oil Cooler — fractured at Spigot to shell — renewed.

The Cast iron jug to shell of Main Inj. Valve (on S. side) — fractured at Spigot — renewed.

The five forward lengths of intermediate shafting tested on lathe & found true.
Pedestal bearings — slightly wiped — dressed up & oil ways re-cut.

Shafting from Thrust shaft aft re aligned with vessel afloat.

Aft dynamo Engine: — crank pin — scored — honed & lapped & bottom end re installed

Cylinder — scored — bored & piston renewed.

Piston rod & Valve rod — scored — renewed

Ballast pump — 2 bucket rods — scored — renewed.

Main Condenser — tubes cleared by rod & washed out afterwards tested by filling with water and other minor repairs

Repairs due to wear & tear:—

L.P. Turbine Rotor — 20/10 rows of blades — bent & broken — renewed
and its four half bearings re installed.

1st Reduction pinion bearings — scored — now re installed

Main Condenser Water ends — division plate of each badly wasted at joint face
— machined and fitted with a new C.I. joint strip on each — bolted on

Auxiliary Pumps overhauled generally and pins & bushes renewed as necessary.

Evaporator — 3 copper coils renewed.

Port Main Boiler: one stoppered stay tube — found broken at one end — renewed

P & S main Boilers: All superheater & de-superheater elements — which were found badly wasted — renewed & joint tested after fitting in place.
See Manchester City C. 924

Donkey Boiler: all plain & stay tubes — badly corroded — renewed

the 2 furnaces which were found badly collapsed — now renewed

The boiler was tested after repairs by 150 lb DWT & found tight.

The Cast iron propeller — blade tips badly wasted — renewed.

The Discharge Valve Chest of the Weirs Feed Pumps which burst when preparing for mooring trials — was temporarily repaired by O.A. gas welding after preheating, pending the arrival of a new chest — and has now been renewed.

Alteration by owners. A new & larger Auxiliary Condenser fitted.

A new Fan Engine & Fan fitted.

The Main Gear Wheel (complete with hub & shaft) and its pinion which were 1" pitch ALL-ADDENDUM. have now been renewed with teeth 1 1/2" pitch stated on account of reported increasing noise during running.

See Forging Reports attached.

M. 1001. Donkey Boiler. Superheaters repaired. Gearing partly renewed etc. etc.

Machinery examined for Grounding & damage. Anything found repaired etc.

It is submitted that this vessel is eligible for

THE RECORD, Volume 54/1

without special condition

Revised to 50 P. 1000

120th

8/9/41

Electrical Installation

The electrical installation was examined and
tested under working conditions after minor repairs and
modifications had been carried out and was found
satisfactory

L. B. Bowen