

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

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

No. in Reg. Book. **28402** Survey held at **Hull** Date, First Survey **31.1.40** Last Survey **6.3.1940** (No. of Visits **12**)

**on the Machinery of the Wood, Iron or Steel** **B.S. "LEO"**

Tonnage { Gross **1139.59** Net **637.3** Vessel built at **Stettin** By whom **Stettiner Oderwerke** When **1908**

Nominal Horse Power { **128** Engines made at **Stettin** By whom **do.** When **1908**

No. of Main Boilers **Two** Boilers, when made (Main) **1908** (Donkey) ☒

No. of Donkey Boilers **nil** Owners **Ellerman Wilson & Co. Ltd.** Owners' Address **Hull** Voyage ☒

Steam Pressure in Main Boilers **185 lb** Managers **Victoria Dk.** If Surveyed Afloat or in Dry Dock **Victoria Dk.** (State name of Dock.)

in Donkey Boilers ☒

Last Report No. **Port**

Particulars of Examination and Repairs (if any) **L.M.C.**

(Periodical Surveys, when held, must be reported in detail and seriatim 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

Was a damage report made by anyone else? If so, by whom?

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

" " Donkey " " " "

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. **Pat 13-2-40**, **Stbd 31-1-40** Present condition of funnel **efficient**

Did the Surveyor examine the Safety Valves of the Main Boiler? **yes** To what pressure were they afterwards adjusted under steam?

Did the Surveyor examine the Safety Valves of Donkey Boiler? To what pressure were they afterwards adjusted under steam?

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? **yes**, and of the Donkey Boilers?

Did the Surveyor examine the drain plugs of the Main Boilers? **yes**, and of the Donkey Boilers?

Did the Surveyor examine all the mountings of the Main Boilers? **yes**, and of the Donkey Boilers?

Has screw shaft now been drawn and examined? ☒ Is it fitted with continuous liner? ☒ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? ☒

Has shaft now been changed? ☒ If so, state reasons ☒ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? ☒

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 ☒ State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft ☒

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 **To complete the survey**

**the main steam pipes require to be examined and tested, Owners Supt.**

**states this will be effected at first convenient opportunity.**

**Previously examined**

**Sea connections, propeller, sternbush and outside fastenings (Please**

**see previous Hull Rpt No 50177)**

**Now done**

**Main and auxiliary machinery opened and an**

**examination made of the main engine cylinders, pistons, valves**

**chest, rods, crank, main and bottom end bearings, Thrust shaft,**

**block and shoes, intermediate shafting, shaft bearings**

**General Observations, Opinion, and Recommendation: The machinery of this**

(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, B.S. 9, 11, B.S.M.S. 9, 11, & L.M.C. 9, 11, or

**L.M.C. 140 lb., F.D., &c.)**

**vessel, so far as now seen, is in an efficient condition, and eligible in our**

**opinion to remain as classed, and to have record of L.M.C. 3-40, on completion**

**of survey, subject to the M.P. slide valve and false face being examined**

**not later than 3-41.**

Survey Fee (per Section 29) **L.M.C. £10:0:0** Fees applied for **16 MAR 1940**

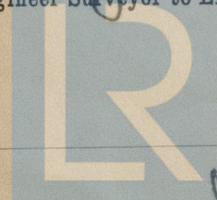
Special Damage or Repair Fee (if any) (per Section 29.) **£** Received by me, **John Douglas**

Travelling expenses (if chargeable) **£** 19 **Engineer Surveyor to Lloyd's Register of Shipping.**

Committee's Minutes **FRI 29 MAR 1940**

Assigned **Deferred**

**UNDERTAKING CASE** **B.S. 40**



Lloyd's Register  
Foundation (113)



S. S. LEO

(PENT) main condenser, main and auxiliary pumps and pumping arrangements, dynamo and electrical installation, steering gear and windlass, the above found or placed in good order.

The Port and Stbd main boilers examined in their entirety together with safety valves and mountings, all found or placed in good order.

Main boilers examined under steam and the safety valves adjusted to the above stated pressure.

Main and auxiliary machinery, steering gear and windlass examined under working conditions and found satisfactory.

Dynamo governor tested and found in good order, the insulation resistance of the electrical installation tested and found satisfactory.

A  $7\frac{1}{2}$  K.W generator and engine (ex "Spero") has been fitted in place of the existing generator, de-Gaussing equipment having been fitted, and the switchboard and a large proportion of the wiring have been renewed.

The main engine M.P. slide valve and false face are somewhat worn, and it is recommended that they be again examined not later than 3-41, considered efficient in the meantime.

Three tube stoppers (fitted as additional stiffening only) drawn examined, found satisfactory and replaced. Tubes intact.

Repairs effected.

Stbd boiler, stbd b.b., port side knuckle built up on fire side, in way of wasted plate on water side.

Water gauge columns removed and cleaned, pipes annealed and tested.

Attached main engine feed pump body (two pumps) and two feed pump rams renewed (presumed fractured by frost while laid up).

Two bilge pump rams and circulating pump (N.E.) rod skimmed, neck-gland bushes renewed.

New steam and exhaust pipes fitted to dynamo engine.

Various minor repairs effected.

JP.



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W410-0140121311



At due 2.39 keel.

No 1 due 11.37 partly hold

Completion is 14/1 Approved.

The MP Slide valve & cylinder face  
are worn.

Minor repair

It is submitted that  
this vessel is eligible for

THE RECORD. At 3.40

It is submitted that this  
vessel will be eligible

for the record. At 3.40 when

the steam pipes have  
been examined & tested

GA

27/3/40



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Particulars of Scuppers and Sanitary Discharge Pipes —

Particulars of Side Scuttles :

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—

RETAIN

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... ..						
Forward Well ... ..						
State position of each freeing port ... .. } After Well :— (F. and A. position and height above deck edge) } Forward Well :— State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— Additional area where sheer is less than standard.						

Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..								
Bridge, Forward Bulkhead ... ..								
Forecastle Bulkhead ... ..								
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super- structure Decks ... ..								
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances ... ..								
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ... ..	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ... ..	
Bridge, Forward Bulkhead ... ..	
Forecastle Bulkhead ... ..	
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super- structure Decks ... ..	
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances ... ..	
Deckhouses on Flush Deck Ships ...	



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