

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

(Received at London Office 1-4 JAN 1943)

Date of writing Report.....19..... When handed in at Local Office **31 DEC 1942**.....19..... Port of **HULL**

No. in Survey held at **Hull**..... Date. First Survey **25.9.42** - Last Survey **4.12.1942**

Reg. Book. **81642** on the Machinery of the **Wood, Iron or Steel** **SUNNIVA** (No. of Visits.....11.....)

Tonnage { Gross **1368** Vessel built at **Aberdeen** By whom **Hall, Russell & Co. Ltd** Year. Month. **1931 5**
 Net **663** Engines made at **Aberdeen** By whom **Jedburgh** When **1931**
 Nominal **255** Boilers, when made (Main) **1931 5** (Donkey) **1931**
 Horse Power **2** Owners **N. of Scotland & Orkney and Shetland Steam Navigation Co. Ltd** Owners' Address **10, Colinton Road, Edinburgh**
 No. of Main Boilers **2** Managers **Gen. Steam Navigation Co. Ltd** (if not already recorded in Appendix to Register Book.)
 No. of Donkey Boilers **nil** If Surveyed Afloat or in Dry Dock **Albert Dock, Wm. Wright, D.D.** Voyage **to Hull**
 Steam Pressure in Main Boilers **200lb**
 in Donkey Boilers **✓**

Last Report No. **1942 278** Port **HULL**

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

(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.)

CHARACTER. Date of last Survey and of Periodical Surveys.	Years assigned now or expired.	Machinery and Boiler Surveys (including date of N.B., if any)
*100 A.I. with fuelrod 4-39		*L.M.C. 4-39
S.S. A.I. N° 2 - 39		T.S. cl. 4-39

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? **None**

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

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

If not, state for what reasons. **None**

What parts of the Boilers could not be thus thoroughly examined? **None**

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? **None**

State latest date of internal examination of each boiler.

Did the Surveyor examine the Safety Valves of the Main Boilers? **yes** To what pressure were they afterwards adjusted under steam? **efficient 200lb/10"**

Did the Surveyor examine the Safety Valves of the Donkey Boilers? **yes** To what pressure were they afterwards adjusted under steam? **efficient**

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 the screw shaft now been drawn and examined? **yes** Has it a continuous liner? **yes** Is an approved oil retaining appliance fitted at the after end? **no**

Has the shaft now been changed? **no** If so, state reasons.

Has the shaft now fitted been previously used? **no** Has it a continuous liner? **no**

Is an approved oil retaining appliance fitted at the after end? **no** State date of examination of Screw Shaft **9-11-42** State the wear down in the stern bush **3/32"**

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. **now done complete**

Vessel placed in drydock. Propeller stern bush and outside fastenings examined, sea connections opened and examined. Tailshaft chain, examined, found satisfactory.

Main and auxiliary machinery opened and an examination made of the cylinders, covers, pistons, rods, valves and chests, crank main and bottom end bearings, main condenser, attached air feed bilge pumps, thrust block, shaft & shoes, intermediate shafts and bearings, pumps and pumping arrangements, dynamos and electrical installation, steering engine and windlass, all found in good order. Main steam pipes satisfactorily tested to 400lb/10"

Boilers examined internally together with safety valves and mountings, all found in good order.

General Observations, Opinion, and Recommendation: **eligible in my opinion to remain as closed, and to have record of *L.M.C. 12.42, and T.S. cl. 11.42.**

(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, BS 9.11, B&MS 9.11 *L.M.C. 9.11 or *L.M.C. 140 lb., FD, &c.)

Survey Fee (per Section 29) **L.M.C.** £ 11 : 0 : 0 Fees applied for **31 DEC 1942**

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

Travelling expenses (if chargeable) £ : : 19.....

Committee's Minute **TUE 26 JAN 1943**

Assigned **+L.M.C. 12.42**



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

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

G170-0051

Boilers examined under steam and the safety valves adjusted to 200 lbs/sq in

Main and auxiliary machinery, pumps and pumping arrangements, dynamos (and governor) and electrical installation, steering gear and windlass tried under working conditions and found satisfactory. Electrical installations satisfactorily rechecked and tested.

A new 15 Kw. generator 110V. 875 R.P.M. made by the Sunderland Forge and Engineering Co. Ltd, has now been fitted, a new Sundango switchboard has also been fitted, so that any circuit may be connected to either dynamo, but the dynamos are not capable of being run in parallel.

The dynamo is compound wound, and fitted on the starboard side of E.R., adjacent to existing machine.

Repairs effected

Existing dynamo engine cylinder lantern piece found fractured at aft end, a bolted patch being fitted, as a precaution a similar patch fitted at fore end of lantern piece, considered this forms an efficient repair.

Main engine attached feed pump rams skimmed, new neck and gland bushes fitted.

Water and feed pump cylinder and water end rebored, new piston and rings, new bucket rings fitted. Piston rod machined.

Biculating pump impeller shaft renewed, engine cylinder rebored, new piston and rings fitted, valve cage rebored, new piston valve fitted.

Ballast pump piston and bucket rings rebored. Piston and bucket rods skimmed, new piston and bucket rings fitted.

Existing dynamo valve and piston rods machined, armature repaired.

Other minor repairs effected

SA 11-12-42
S. 11.42
T.L.M.C.

25-11-43

SS No. 3 on 5.43 am hrs.
Screw shaft - examined.
An additional dynamo fitted.

It is submitted that this vessel is eligible for the RECORD.

