

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

(Received at London Office 11 JUN 1951)

Date of writing Report 19 When handed in at Local Office 7 JUN 1951 19 Port of NEWCASTLE-ON-TYNE

No. in Survey held at 7321 on the Machinery of the Wood, Iron or Steel M.V. "DINGLEDALE" Date. First Survey 11 April Last Survey 28 May 1951 (No. of Visits 2)

Tonnage Gross 8182 Vessel built at Glasgow By whom Harland & Wolff Ltd When 1941 9
Net 4805 Engines made at Glasgow By whom Harland & Wolff Ltd When 1941
Nominal Horse Power 502 MN Boilers, when made (Main) (Donkey) 1941
No. of Main Boilers Owners The Admiralty Owners' Address (if not already recorded in Appendix to Register Book.)
No. of Donkey Boilers 2 DB Managers Port LONDON Voyage
Steam Pressure in Main Boilers in Donkey Boilers 150 lbs. If Surveyed Afloat or in Dry Dock Both (State name of Dock.) Messrs Palmers, Hebburn.

Last Report No. Port

Particulars of Examination and Repairs (if any) Docking TS CS DBS alterations

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.

On 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?

Donkey " " " " yes

If not, state for what reasons What parts of the Boilers could not be thus thoroughly examined?

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: 24-4-51 Present condition of funnel Efficient

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

Did the Surveyor examine the Safety Valves of the Donkey Boilers? yes To what pressure were they afterwards adjusted under steam? 150 lbs per sq. in.

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

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

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

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 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 oil retaining appliance fitted at the after end? State date of examination of Screw Shaft 8-5-51 State the wear down in the stern bush .143 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

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

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done. C.S. base See Form 7E.

To complete the previous cycle the inboard auxiliary compressor, the aft oil fuel unit pump and the steam pipes remain to be examined. These items have now been examined without opening up, and are seen to be in efficient condition meanwhile. The Admiralty Overseer states that these items will be dealt with when the vessel stops to complete the heavy oil conversion in 2 months time; and that all the main engine cyl. liners will be renewed at that time. (annual refit)

Now done for docking and T.S.

Vessel placed in drydock. Examined propeller, aft end of sternbush, tailshaft (drawn on) sternbush, sea cocks and valves (opened out) and their shell fastenings, all being found or now placed in good order.

Now done for C.S.

Examined all main engine cylinders, liners, covers, valves, pistons, rods, crossheads top and bottom end bearings, crankshaft complete and main bearings, the thrust block and shaft and all attached pumps all being found or now placed.

General Observations, Opinion, and Recommendation: The machinery of this vessel so far as now seen is in efficient condition and eligible in my opinion to remain as now classed with fresh record of TS. 5.51 DBS 5.51 and LMC. CS 5.51 when the inboard auxiliary compressor, the aft oil fuel unit pump and the steam pipes have been examined.

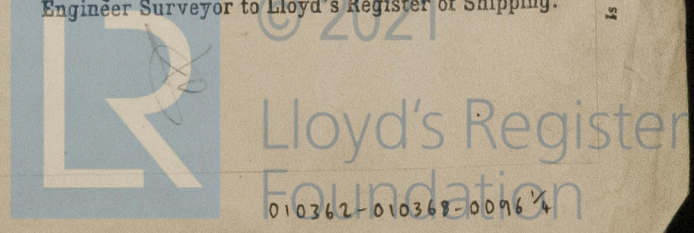
Survey Fee (per Section 29) TS 3 0 0 CS 18 0 0 DBS 6 0 0 Fees applied for 7 JUN 1951

Special Damage or Repair Fee (if any) (per Section 29.) alterations 5 0 0 Received by me, S.N. Clayton R.W. Skinner

Travelling expenses (if chargeable) Elec 8 0 0 new generator 3 0 0 19

Committee's Minute TUE 8.17 JUL 1951

Assigned Deferred for comp. C.S. S. 5.51 DBS 5.51



Sheet N° 2.

M.V. "DINGLEDALE"

Now done for C.S. contd.

... in good order. Examined inboard and outboard steam generators, outboard compressor and cooler; general service, piston cooling, lub. oil, ballast, boiler feed, bilge and fresh water pumps, ford. oil fuel unit pump and oil fuel transfer pump, lower air receiver; lub oil and water coolers, fan engine, condenser, evaporator and settling tanks all being found or now placed in good order.

Now done for D.B.S.

Examined both donkey boilers internally and externally, together with doors and fastenings, mountings and safety valves, the latter afterwards being adjusted under steam to the above stated pressure. Examined steam smothering installation and the oil burning arrangements including the deck control gear under working conditions and all found satisfactory. The hot oil pipes between the pumps and furnace fronts were found to be well-lighted and in efficient condition.

Owners Alterations.

The Owners have now commenced fitting an installation to the vessel to enable boiler oil to be used in the main engines in place of diesel fuel. As however delivery of the two De Laval Separators will not take place for some time the work has been advanced as far as possible and the Owners Representative states that the conversion will be completed in 12 mos. time at the next annual refit.

The work now done has been carried out in accordance with the approved plans and the Secretary's letters with the following modification:-

The existing lub. oil and cylinder oil tanks have not been removed from their original positions and the existing boiler oil tank (5 tons capacity) is now to be used as a dirty diesel settling tank. The latter oil will be used as boiler oil when required for the exhaust gas heated donkey boilers.

The existing settling tanks are to be used as follows: Port tank - purified oil and the starboard tank has been divided by means of an oil tight bulkhead, to carry unpurified oil in the inboard tank and diesel oil in the outboard tank. The existing heating coils in the starboard settling tank were removed in way of the new outboard diesel tank, and closed up in way of the inboard tank, and hydraulic tested with satisfactory results on completion.

In order to allow the vessel to make normal use of the tanks at present, the oil tight bulkhead dividing the starboard settling tank has been pierced to make the tanks common; and a blank plate supplied for fitting when the conversion is completed.

An oil fuel heater supplied by the Admiralty for heating the unpurified oil before purifying has been installed in the starboard engine room main deck, and a Swinney type oil fuel heater was fitted for heating the purified oil before injection. L.N. 224-36 (Cont. attached)

The existing diesel oil transfer pump has been connected to the unpurified oil tank and a new Hayward Tyler pump N° BR 46368 6" x 5" x 6" has been fitted to act as diesel oil transfer pump.

See Sheet N° 3.

S.M. Blayton.

Sheet N° 3

M.V. "DINGLEDALE"

Owners Alterations contd.

The fuel valve cooling water system was modified and a new Hayward Tyler pump N° BR45935 3" x 2 $\frac{3}{4}$ " x 3" and a Worthington Simpson electric pump N° 5086056 fitted to circulate fresh water through the fuel valves.

The modifications to the fuel valves themselves, will be effected when the conversion is completed.

The Owners have also installed a 50KW Diesel Generator, supplied by The Admiralty. The set consists of a 4 cylinder, four stroke S.A. M. Laren Engine N° 30128 Q driving a Mather and Platt dynamo N° 129502 (for details of electrical side see following sheet) and has been satisfactorily fitted in the starboard engine room. As the seating for the latter set was placed in way of the bilge pump sea suction valve, the latter valve was removed and satisfactorily refitted two frame spaces forward and the original shell opening satisfactorily blanked. The suction pipes to the pump were modified as required.

Wear and tear repairs. for C.S.

Nos 5 and 8 bottom end bottom halves and N° 3 bottom end top half were remetalled, the existing metals being found cracked and loose.

The bilge pump bucket rods were found severely worn and were satisfactorily renewed. A new piston valve was fitted to the inboard steam generator.

Other minor repairs were effected to the main and auxiliary machinery for DBS.

The Port Blr. main feed check valve was satisfactorily rejointed to the boiler shell on account of leakage. One length of aux. feed pipe to the Starboard Blr. was found to be leaking at one flange, and was renewed by the Owners; a new S.D. steel pipe stamped LLOYDS TEST 25-5-51 600 lbs SNC being satisfactorily fitted.

Other minor repairs were effected to the boilers and their mountings.

On completion of repairs the main and auxiliary machinery were examined under working conditions, including the steering machinery and windlass and were found in efficient condition.

S.N. Blayton

SURVEYOR TO LLOYD'S REGISTER.
NEWCASTLE-ON-TYNE.

The approved plan showing "Diagram of Diesel and Heavy Oil Fuel Pipes" is forwarded herewith. The plan showing the modifications to tanks as noted on Sheet N° 2 will be forwarded as soon as the prints are received from the Ship Repairers.

Sob.

SURVEYOR TO LLOYD'S REGISTER.
NEWCASTLE-ON-TYNE.

P.S. The latter plan of the "AS FITTED" "Diagram of Diesel and Heavy Oil Fuel Pipes" is now to hand and is attached hereto.

Sob.

M. V. "DINGLEDALE"

SURVEY OF ELECTRICAL INSTALLATION.

No in reg. Bk 57321 NAME OF VESSEL —

Capacity of Installation K.W Generators: 2-20KW 110volts (steam driven) 1-50 KW ^{diesel} now added ^{drum}.

Nature of Survey Special Survey.

No of Visits 5 Where Surveyed Hebburn-on-Tyne.

A Special Survey of the electrical equipment was carried out, Generators, cables, fittings, & main Switchboard examined.

The following modifications and repairs were carried out:-

1- Additional diesel driven main generator fitted in engine room (aft of steam driven sets) 50KW. 115 volts 435amps 1000 R.P.M. E.V.D.P. Admiralty type machine Serial No 129502 ^{D/E}₃₂₇ manufactured by Mathies & Platts. and new control switchboard for same fitted above generator set, comprising D.P. Circuit Breaker, Ammeter, Voltmeter, and Regulator, connected to main Switchboard through change over switch, in accordance with rule requirements.

Steam driven generators, Vent Fan motors, oil separator motor and galley compressor motor overhauled. Midship house rewired in way of hull repairs. Admiralty Radar type 268 removed from ship, and replaced by "Decca" type Radar equipment. All faults on circuits and fittings rectified.

On completion of the above, installation seen under working conditions, generators tested for compounding, and governing, circuit breaker trips tried. All circuits megger tested, and all found to be in order.

FIRST SURVEY 24th AprilLAST SURVEY 28th May 1951.

No. OF VISITS

five.

J. M. Wright

SURVEYOR TO LLOYD'S REGISTER,
NEWCASTLE-ON-TYNE