

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

(Received at London Office)

9 MAR 1950

Date of writing Report 28. 2. 50 When handed in at Local Office 19. 50 Port of Hamburg

No. in Survey held at Hamburg Date. First Survey 18. 1. 50. Last Survey 18. 2. 50 (No. of Visits 13)

21450 on the Machinery of the Wood-borer Steel M.V. "PANSIO"

Gross 7741 Vessel built at Kiel By whom Deutsche Werke A.G. When 1931 5  
 Net 4230 Engines made at Kiel By whom Deutsche Werke A.G. When 1931 5  
 Nominal 726 MN Boilers, when made (Main) - (Donkey) 1931  
 of Main Boilers - Owners A/B Turret Owners' Address -  
 of Donkey Boilers 2DB Managers - (If not already recorded in Appendix to Register Book.)  
 Steam Pressure - Port Helsingfors Voyage -  
 in Main Boilers -  
 in Donkey Boilers 114 1b If Surveyed Afloat or in Dry Dock Both  
 (State name of Dock.) (Deutsche Werft)

st Report No. Port

rticulars of Examination and Repairs (if any) Damage, LMC CS, DBS, Conversion.

Medical Surveys, when held, must be reported in detail and verbatim in the terms of the Rules. State clearly the cause of Repairs, if any, d, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be ted) 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. L.O. 22.2.50. M.

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 yes, report made.

Is a damage report made by anyone else? If so, by whom? no

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

Donkey " " " yes

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

st 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? -

Latest date of internal examination of each boiler P. & S. 7.2.50. Present condition of funnel (B) 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? 114 lbs.

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? -

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? no Has it a continuous liner? - Is an approved oil retaining appliance fitted at the after end? -

Has the shaft now been changed? - 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 - State the wear down in the

Shaft bush P. & S. 1,5 mm Is electric light and/or power fitted? yes If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? no

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? no

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

Survey is not complete, state what arrangements have been made for its completion and what remains to be done. Spare cam-shaft drive secondary gear wheel remains to be supplied. The Owners' Superintendent states a new wheel will be obtained as early as possible.

Vessel placed in dry-dock; examined propellers and outside fastenings, sea valves (opened), cone of Port screw shaft, P. & S. 1,5 mm.

LMC CS: - Examined all P. & S. Main Engine cylinder liners, bottom ends and crank pins, pistons, covers, valves and P. top ends, pins and rods. P. & S. attached lubricating oil and piston cooling oil pumps, Port cam-shaft gear

ve, M.E. holding down bolts, Starbd. thrust block, forward and aft S.A. receivers, P. & S. daily service oil fuel

ks and additional Diesel oil tank. Both M.E. lub. oil coolers (tested), both P.C.W. coolers (tested), aux. condenser

sted), three additional O.F. heaters (tested), M.E. fuel injection valve fresh water cooling pump.

Examined P. & S. donkey boilers in their entirety with their mountings, doors and fastenings, safety-valves adjusted

er steam to 114 lbs/sq.in. Boiler front O.F. pressure pipes under working conditions, fire extinguishing equipment

sted), O.F. deck controls (including additional tank) examined and all found satisfactory.

see overleaf - 2 -

General Observations, Opinion, and Recommendation: The machinery of this vessel so far as seen is in good order

(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 - LMC 9,11 or LMC 140 lb., FD, &c.) CS 2,34.

Is eligible in my opinion to remain as classed in the Register Book with fresh record of DBS 2,50 now and

CS (with date) when the survey is complete, subject to spare cam-shaft drive secondary gear wheel being

plied at first opportunity.

Survey Fee (per Section 29) LMC CS 60 : 0 : 0 Fees applied for

DBS 12 : 0 : 0

Special Damage or Repair Fee (if any) 10 : 0 : 0

Conversion to Diesel Oil M.E. 15 : 0 : 0

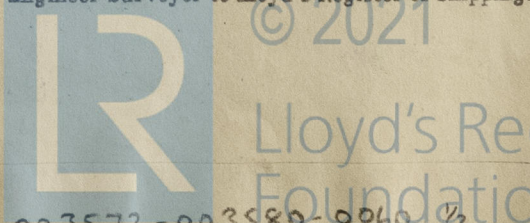
Travelling expenses (if chargeable) 2 : 10 : 0

Committee's Minute TUES. 4 APR 1950

signed As now, subject

DBS 2,50

Engineer Surveyor to Lloyd's Register of Shipping.



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

OIL ENGINES  
CONTINUOUS SURVEY

Is a Certificate required? If so, to be sent to



M.V. "PANSIO".

Damage stated due to colliding on 26.6.49. with the S.S. "ALDEN" at Brunsbuettelkoog.

For further particulars, see vessel's log book.

Now done for Damage: - Vessel placed in dry-dock, examined propellers and outside fastenings and placed in good order.

Repairs on account of Damage: - One blade tip of port propeller faired and one tip renewed by fusion-welding (cracked about 3" from tip).

H. & T. Repairs: - No.2 Port bottom end bearing top half remetalled (cracked) Port engine cam-shaft drive secondary gear wheel replaced by spare (a number of teeth broken). Starbd. thrust ahead pad hinge pins renewed (wear).

P. & S. main engine holding-down bolts hardened up. Main electric cables to main mast and from engine room to to bridge house renewed.

D. boilers: - Port boiler Port box all tubes renewed. Starbd. box all plain tubes renewed.

Starbd. boiler Port box all plain tubes renewed. Starbd. box all tubes renewed.

(Tubes corroded and leaking.)

A few C.C. back stays renewed in both boilers (fractured) Boilers tested hydraulically on completion of repairs and found satisfactory.

Induced steam-turbo fan overhauled.

Conversion from light-Diesel to Diesel or boiler-oil burning: - The engines previously were arranged to burn light-Diesel oil only. New fuel oil injection valves and spares have been supplied and fitted to the main engines; valves are designed for injection of Diesel or boiler oil and arranged with heating or cooling of the nozzles. Additional auxiliaries have now been installed for this new arrangement but the Owners have decided to burn Diesel oil only for about nine months before changing over to burning boiler oil. The following additional auxiliaries and alterations have been installed satisfactorily.

O.F. Daily tanks have been lagged.

Set of Deutsche Werft Turbulo filters.

Set of Autoclean filters.

Two new O.F. separators.

Three oil fuel heaters (tested and stamped "LLOYDS TEST 20 atu. and 28 atu. W.A.A."). One heater on each main engine oil fuel line and one on line before O.F. separators.

One light-Diesel oil service tank (1,000 ltrs. capacity) for galley built and installed with fittings in accordance with Rules.

One fresh water service tank of 1,000 ltrs. capacity and 1.1 KW electric driven pump for cooling water to M.E. fuel injection valves.

Pipe lines for the above fitted and so arranged that heaters and separators may be bye-passed when engines are burning Diesel oil.

Quay side trials of main engines burning Diesel oil witnessed and carried out with satisfactory results.

DIAGRAMMATIC PLAN of light to heavy Diesel oil conversion attached.