

Rpt. 9

Date of writing report..... Received London 20 MAY 1960 Port LONDON No. 142590
Survey held at LONDON No. of visits 5 First date 21.4.60 Last date 28.4.60

REPORT OF PERIODICAL SURVEYS & REPAIRS OF MACHINERY

No. in R.B. 20559 Name S.S. "MANDACATA" Gross tons 7681 Date of build 1945
Owners Furness, Withy & Co. Ltd. Managers Port of Registry London
Engines made 1945 By Wasthouse Elect. & Mfg. Co. Type 2 s.t.m. turbines DR geared to
No. of Main Engines 1 No. of Screws 1 Records of Survey & Special Notations as per Register Book sc. shaft.

	Hull	Machinery
No. of Main Boilers 2 WT. W.P. 525lb. Spt. 475lb.	BS. 6-59	MBS. 6-55
No. of Aux./Donkey Boilers - W.P. -	S.S. 1-56	MBS. 2-59
Surveyed Afloat or in Dry Dock Both		TS. CL. 6-57
Nature of Survey Cond. of Class Prop. Dam.		SPS. 6-55
Was Damage Report issued? No Int. Cert.? Yes.		
Last Report (For Head Office only)		

The condition of any of the following items is to be described as "good" only when the part has been examined, found or placed in good condition, and is considered to be acceptable until the due date of the next Periodical Examination. Where it is considered that re-examination or repairs should be effected before the due date of the next Periodical Examination a distinguishing mark thus † should be inserted against the item and the circumstances and action recommended described fully under "defects and repairs". At part or complete Special Surveys those items which are not applicable to the ship should be cancelled with a black line; this need not be done when the machinery is on a continuous survey basis. When any part has been subjected to pressure test this should be stated. Engine parts when referred to by numbers should be counted from forward.

DOCKING Propellers Good Wear Down of Stern Bushes 1/16" Oil Glands Sea Connections
Fastenings Good Has Screwshaft Tubeshaft been drawn? No Date of Examination Has Shaft been changed?
Has Shaft now fitted been previously used? Has Shaft now examined/fitted a continuous liner? Approved oil gland?

MAIN ENGINES (Recip. Steam or I.C.) PORT STARBOARD

- 1 Cyls., Covers, Pistons & Rods
- 2 Valves & Gears
- 3 Connecting Rods, Top Ends & Guides { Side, Centre
- 4 Crankpins & Bearings { Side, Centre
- 5 Journals & Bearings

MAIN ENGINE DRIVEN AIR COMPRESSORS

- 6 Cyls., Covers, Pistons & Rods
- 7 Connecting Rods & Top Ends
- 8 Crankpins & Bearings
- 9 Journals & Bearings
- 10 Coolers & Safety Devices

MAIN ENGINE DRIVEN SCAVENGE PUMPS

- 11 Cyls., Covers, Pistons & Rods
- 12 Connecting Rods & Top Ends
- 13 Crankpins & Bearings
- 14 Journals & Bearings
- 15 Levers

SCAVENGE BLOWERS

SUPERCHARGERS

MAIN TURBINES

- 18 Casings, Rotors, Blading, Bearings & Thrusts

EXHAUST STEAM TURBINES (WITH RECIP. ENGINES)

STEAM COMPRESSORS

CLUTCHES & HYDRAULIC COUPLINGS

REDUCTION GEARING

THRUST BLOCKS, SHAFTS & BEARINGS

INTERMEDIATE SHAFTS & BEARINGS

HOLDING DOWN BOLTS & CHOCKS

CONDENSERS (MAIN & AUX.)

STEAM RE-HEATERS

DE-SUPERHEATERS

STOP & MANOEUVRING VALVES

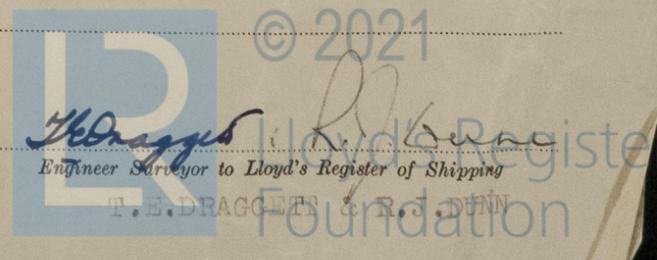
MAIN ENGINE DRIVEN PUMPS

CRANKCASE DOORS & EXPLOSION RELIEF DEVICES

Have Main Engines been tested working and manoeuvring?

OPINION OF MACHINERY AND RECOMMENDATIONS The machinery of this ship, as now seen is in good working order and eligible, in my opinion to remain as classed without fresh record of survey and without special condition in respect of the main circulating pump armature shaft subject to any outstanding conditions of class being dealt with as previously recommended.

Date of Committee WEDNESDAY 8 JUN 1960
Decision Ashport
Deferred for ES



If certificate is required state where to be sent.

- 32 Essential Independent Pumps (Identify by position)
- 33 Bilge, Ballast & Oil Fuel Suction Lines, Fittings & Controls
- 34 Have the remaining Piping Arrangements & Fittings in the machinery space been examined as considered necessary?
- 35 Fresh Water Coolers
- 36 Lub. Oil Coolers
- 37 Heaters (state service)
- 38 Independent Air Compressors, Coolers & Safety Devices
- 39 Air Receivers & Safety devices—Main
- 40 Auxiliary
- 41 Oil Fuel Tanks (Not forming part of hull structure)
- 42 Evaporators
- 43 Have Evaporator Safety Valves been tested under steam?
- 44 Steering Machinery
- 45 Windlass
- 46 Fire Extinguishing Arrangements

AUXILIARY ENGINES (Identify by position)

PROPULSION		ELECTRICAL EQUIPMENT		AUXILIARY EQUIPMENT	
PORT	STARBOARD	PORT	STARBOARD	PORT	STARBOARD
a Generators			l Generators & Governors		
b Exciters			m Motors		
c Air Coolers			n Switchboards & Fittings		
d Motors			o Circuit Breakers		
e Air Coolers			p Cables		
f Control Gear, Cables, etc.			q Insulation Resistance		
g Insulation Resistance			r Steering Gear Generators and Motors		
h Insulating Oil Test			s Navigation Light Indicators		
i Overspeed Governors					
j Magnetic Couplings					
k Air Gap					

BOILERS OPENED UP & EXAMINED (Identify by position and state latest date of internal examination of each boiler)

MAIN AUXILIARY, DONKEY or PRESS

Superheaters

Safety Valves

Mountings, Doors & Fastenings

Safety Valves Adjusted to { Sat.
Spt.

Boiler Securing Arrangements

Main Economisers Exhaust Gas Heated Economisers

Steam Heated Steam Generators Steam Generator Safety Valves Adjusted to

Were Oil Burning System & Remote Controls examined working in accordance with Rules? Forced Circulating Pumps

Have Saturated Steam Pipes in cylindrical boiler smoke boxes been examined as required by Rules? Funnel

EXAMINATION & TESTING OF STEAM PIPES (State material)

Main Auxiliary (over 3 in. bore)

Were Copper Pipes annealed? Have Saturated Pipes in cylindrical boiler smoke boxes been tested?

PARTICULARS OF DEFECTS & REPAIRS, ETC. (Damage repairs should be detailed separate from wear and tear repairs; state what action has been taken regarding items which are subjects of class)

Propeller Damage:- Attended on board at the request of the Owners representative on account of damage to the propeller said to have been sustained by contact with the side of Latchford Lock in the Manchester Ship Canal at 05.27 hours on 10th April 1960 whilst on passage from Manchester to London in part loaded condition.

Two diametrically opposite blades of the four bladed bronze propeller found set over aft at right angles for lengths of 3" and 6" respectively from tips. Leading edges of two remaining blades found to be serrated over lengths of approximately 24", and one blade cracked radially inwards from tip for a length of 6".

NOW DONE:- Screwshaft tested for truth in position and found true, end of crack in blade drilled, crack veed out welded up and dressed off, distorted blades bared up and serrated edges dressed up smooth.

CONDITION OF CLASS:- The vessel's class is subject to the main circulating pump armature shaft being renewed upon arrival in London.

Please see Manchester Report No.19438 for further details. The armature shaft was found to have fractured completely at the large end of its taper in way of the upper surface of the coupling. SEE FOLLOWER.



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Survey fees ...

Machy. Rpm. 210.C.C. 788

Damage fee ... 29.9.C.

Expenses ... 14.6.

16 MAY 1960

Date when A/c rendered

S.S. "MANDAGALA"

NOW DONE:- Shaft tested in lathe and found true, new taper turned on shaft, keyway out and end of shaft in way of small end of taper bored axially and tapped, to accommodate stud for securing new extended coupling.

New steel coupling of approved material and of extended length, to compensate for shortening of armature shaft made and efficiently fitted.

Fit of coupling on shaft taper tested with and without key and found good.

Water end of pump opened up and impeller found eroded in way of sealing rings and vanes and shaft worn in way of bearings.

New impeller and shaft fitted, motor assembled, refitted in position, coupling alignment checked and found good. Coupling bolt holes reamed out, new coupling bolts fitted and hardened up. Pump turned by hand, found free and finally seen running under load satisfactorily.

CONDITION OF CLASS:- Deletion: It is recommended the condition attached to the vessel respecting the main circulating pump armature shaft be now deleted.

MAIN BOILER SURVEY:- For details of Main Boiler Survey please see London Report No.142108 in which M.B.S. 2-60 has been recommended.

T.E. DRAGGETT, R.J. DUNN
Surveyor to Lloyd's Register

of Shipping.

T.E. DRAGGETT & R.J. DUNN

