

Rpt. 9

Date of writing report 13.12.60

Received London

Port HAMBURG

No. 10093

Survey held at Hamburg

No. of visits 16

First date 12.11.60

Last date 11.12.60

REPORT OF PERIODICAL SURVEYS & REPAIRS OF MACHINERY

No. in R.B. 65180 S.S. "INDIAN NAVIGATOR" Gross tons 7660 Date of build 1944
 Name M.V. Owners India S.S. Co. Ltd. Managers Port of Registry Calcutta
 Engines made 1944 By Westinghouse Elec. & Mfg Co. Type 2 Steam turbines DR geared to sc. shaft

No. of Main Engines 2 No. of Screws 1
 No. of Main Boilers 2WTB Spt W.P. 525 lbs, 4791bs
 No. of Aux./Donkey Boilers - W.P. -
 Surveyed Afloat or in Dry Dock both
 Nature of Survey Dkg, CS, SPS, Repairs, SRL
 Was Damage Report issued? no Int. Cert.? yes
 Last Report (For Head Office only)

Records of Survey & Special Notations as per Register Book

Hull			Machinery		
100 A1	SS	5/59	LMC	CS	5/59
Dkg		6/60	MBS		6/60
			TS CL		5/59
			SPS		6/58

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 3, - mm Oil Glands none 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
 16 SCAVENGE BLOWERS
 17 SUPERCHARGERS

MAIN TURBINES

18 Casings, Rotors, Blading, Bearings & Thrusts HP- and LP turbines good

EXHAUST STEAM TURBINES (WITH RECIP. ENGINES)

19 EXHAUST STEAM TURBINES (WITH RECIP. ENGINES)

20 STEAM COMPRESSORS

21 CLUTCHES & HYDRAULIC COUPLINGS HP- and LP flexible couplings, good

22 REDUCTION GEARING

23 THRUST BLOCKS, SHAFTS & BEARINGS

24 INTERMEDIATE SHAFTS & BEARINGS

25 HOLDING DOWN BOLTS & CHOCKS good

26 CONDENSERS (MAIN & AUX.) Main Condenser, Outboard auxiliary condenser and the gland steam condenser, good

27 STEAM RE-HEATERS

28 DE-SUPERHEATERS

29 STOP & MANGUEVRING VALVES

30 MAIN ENGINE DRIVEN PUMPS

31 CRANECASE DOORS & EXPLOSION RELIEF DEVICES Have Main Engines been tested working and manoeuvring? yes, good.

OPINION OF MACHINERY AND RECOMMENDATIONS The machinery of this ship, where now seen, is in efficient condition and eligible in my opinion to remain as now classed with fresh record of SPS 1.60 now, and CS (with date) when the Survey has been completed, without Special Condition re- Main reduction gear HP pinion and 1st reduction wheel being renewed by 12.60.

Date of Committee

FRIDAY 27 JAN 1961

Decision

See Casualty report



YES NOW
Has a Survey also been held on Ship? If so, is the Report sent now, or when will it be sent?

If certificate is required state where to be sent

32 Essential Independent Pumps (Identify by position) Both reciprocating main feed water pumps, good

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 0007 36 Lub. Oil Coolers Outbd. aux., good 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 all rams and starbd hydr. pumps, good 45 Windlass 46 Fire Extinguishing Arrangements

AUXILIARY ENGINES (Identify by position) Outboard turbo generator engine including gear, good

Auxiliary steam ejector with condenser, good

Emergency Fire extinguishing pump with driving engine (in steering gear room)

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

Damage:- Now done on account of damage stated due to a wire rope in the propeller at an unknown date. One small part in the leading edge of one propeller blade broken out and smoothed edge by grinding. Rope guard studs were found broken and the fair water cap partly missing, these parts have been renewed.

SR-List:- The main reduction gear pinion and wheels have been completely renewed. For details see attached Gear First Entry Report.

The gear has been examined first after 5 hours dock trials with 40 rpm and finally after 8 hours sea trials with various speeds between 70 and 85 rpm and all found in good order. The HP flexible coupling has been replaced by the spare coupling. The item regarding the reduction gear should now be deleted from the SR-List.

Boiler repairs:- 33 coils of the starboard boiler superheater have been renewed tested on completion and found in order.

LEAVE THIS SPACE BLANK

Survey fees CS £ 60.0.0
SPS £ 8.10.0
Repair Fee £ 25.0.0
Damage fee

Expenses... £ 10.13.6
Sunday Attendance £ 8.8.0

Date when A/c rendered

Account Rend
- 2 JAN 196



Lloyd's Register Foundation