

16. MAR. 1962

Rpt. 9

Date of writing report 14.3.1962. Received London Port GIBRALTAR. No. 4547.
Survey held at GIBRALTAR. No. of visits 11. First date 2.2.1962. Last date 24.2.1962.

REPORT OF PERIODICAL SURVEYS & REPAIRS OF MACHINERY

No. in R.B. 10369 Name S.S. "ESSO NORWICH" Gross tons 23997 Date of build 5.1959.
Owners Esso Petroleum Co. Ltd. Managers Port of Registry LONDON.
Engines made Lille By Cie. de Fives-Lille Type 2 steam turbines DR geared to
No. of Main Engines One No. of Screws One Records of Survey & Special Notations as per Register Book sc. shaft.
No. of Main Boilers Two W.P. 967 lbs.
No. of Aux./Donkey Boilers - W.P. -
Surveyed Afloat or in Dry Dock Afloat.
Nature of Survey Part Cont. Machy. survey.
Was Damage Report issued? No Int. Cert.? Yes.
Last Report (For Head Office only)

Hull	Machinery
✱ 100 A1	✱ LMC
Oil tanker	ES.CS. 5.59.
DS. 11.61.	MBS. 11.61.
	TS.CL. 5.59.
	steam pipes 11.61N.

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	Wear Down of Stern Bushes	Oil Glands	Sea Connections
Fastenings	Has Screwshaft Tubeshaft been drawn?	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			
19 EXHAUST STEAM TURBINES (WITH RECIP. ENGINES)			
20 STEAM COMPRESSORS			
21 CLUTCHES & HYDRAULIC COUPLINGS			
22 REDUCTION GEARING			
23 THRUST BLOCKS, SHAFTS & BEARINGS			
24 INTERMEDIATE SHAFTS & BEARINGS	No.4 Yes		
25 HOLDING DOWN BOLTS & CHOCKS			
26 CONDENSERS (MAIN & AUX.)			
27 STEAM RE-HEATERS			
28 DE-SUPERHEATERS			
29 STOP & MANOEUVRING VALVES			
30 MAIN ENGINE DRIVEN PUMPS			
31 CRANKCASE DOORS & EXPLOSION RELIEF DEVICES	-	Have Main Engines been tested working and manoeuvring?	Yes.

OPINION OF MACHINERY AND RECOMMENDATIONS

It is recommended that in the case of this vessel the following Survey Records be made in the Supplement to the Register Book ✱ LMC. C.S. with date when the survey has been completed.

THURSDAY 29 MAR 1962
Date of Committee
Decision as now.

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..... Good..... 45 Windlass..... Good..... 46 Fire Extinguishing Arrangements.....

AUXILIARY ENGINES (Identify by position).....

PROPULSION		ELECTRICAL EQUIPMENT	
PORT		STARBOARD	AUXILIARY EQUIPMENT
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)

The vessel was on voyage from Cork to Mersa Al Lybia in ballast, and put into Gibraltar on the 2nd February, 1962, on account of defects in the Main engine No.4 Intermediate shaft bearing, the Windlass and the Steering Gear.

Upon examination, I found and recommended as follows:-

FOUND..... RECOMMENDATION & REPAIRS EFFECTED.....

Main Engine No.4 Intermediate shaft bearing.

Stated to have run warm during the voyage and white metal wiped. Bearing now scraped, re-bedded and oil clearances increased.

Steam Windlass

Continuous trouble reported due to slackening of windlass engine holding down studs and main bearing studs which were inaccessible. Gear case over fore part of windlass removed for access. All holding down studs and main bearing renewed and nuts locked. To reduce flexing and vibration of the

(continued overleaf)

Survey fees ... £46. 0. 0.

Damage fee ...

Expenses .. £14. 0. 0.

Date when A/c rendered.....

Port of GIBRAITAR.

Continuation of Ship/Mchy. Report No. 4547.
Continuation of Report No. dated 14.3.1962.

on the

on the S.S./M.S.

"ESSO NORWICH"

FOUND

owing to fitting of a watertight gear case over this part of the windlass.

RECOMMENDATION & REPAIRS EFFECTED

windlass, two steel joists were welded between the sides of the main wheel frames and the top of the Crankshaft bearing pedestals.

Steering Gear

Rudder Stock carrier thrust bearing.

Rudder stock palm bolts removed, rudder lifted with heavy wires and chain blocks.

Flat bronze thrust bearing ring - 5 ft. dia by 1½" thick, in two half sections.

Port and Starboard hydraulic rams and crossheads dismantled, upper section of the thrust bearing removed and machined true.

Port side half ring found badly worn and ground away ⅝ inch deep into the face of the ring.

Damaged bronze thrust bearing ring removed and new ring supplied by Makers, fitted.

The metal side of upper face of the crosshead clamped to the rudder stock and lower face on top of the Pedestal

Pedestal dismantled and bearing face machined.

found badly scored.

Upper rudder stock bearing bush renewed.

Upper rudder stock bearing badly scored. It was found that the metal splash guard plate over the top of the carrier bearing had no means of lubricating the rudder thrust, and it was not possible to see whether the bearing oil bath contained oil.

Owing to steam capstans being situated on the deck above the steering gear compartment, it was necessary to cut a hole on the Port side of the steering gear compartment in order to transport the parts ashore for machining. (See Report 8 attached).

The splash guard plate over the bearing was fitted with oil boxes and copper supply pipes, to ensure that the lubrication be maintained in future.

On completion of repairs, satisfactory working tests of the steering gear were carried out.

Satisfactory engine trial carried out on completion of repairs.

Interim Certificate confirming continuation of Class issued, also parts credited for machinery part continuous survey.

[Signature]

Refers to C.S. Advanced. It is submitted that this vessel is eligible to remain as CLASSED. 14/7 26/3/62

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