

Rpt. 9
Date of writing report 15-3-57
Survey held at Kasado, Japan

Received London
No. of visits 10

Port Shimonoseki No. 665
First date 22-1-57 Last date 22nd Feb., 1957.

REPORT OF PERIODICAL SURVEYS & REPAIRS OF MACHINERY

No. in R.B. 68374 S.S. "LUCAS TRADER" Gross tons 5343 Date of build 6-1914
Name Lucas S.S. Co. Ltd. Managers Wheelock, Marden Hong Kong Port of Registry Hong Kong
Sunderland By Richardsons, Westgarth & Co. Ltd. Type T 3Cy

No. of Main Boilers 3 No. of Screws 1
W.P. 180 lb

No. of Aux./Donkey Boilers - W.P. -

Surveyed Afloat or in Dry Dock Both
Nature of Survey Blrs, TSCL, Eng & Oil Conversion

Damage Report issued? No Int. Cert.? Yes

Report (For Head Office only)

Records of Survey & Special Notations as per Register Book

Hull			Machinery	
BS*	SS	11/51	MBS*	
SS	Pir	11/51	Eng.	8/51
Dkg		1/56	Blrs	1/56
			TS (CL)	2/55
			sps	11/54

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.

PROPELLERS Good Wear Down of Stern Bushes 1.8 mm Sea Connections Good

Fastenings Good Has Screwshaft/Tubeshaft been drawn? Yes Date of Examination 2-2-57 Has Shaft been changed? Yes

Has Shaft now fitted been previously used? Yes Has Shaft now examined/fitted a continuous liner? Yes

MAIN ENGINES (Recip. Steam) Good

Cyls., Covers, Pistons & Rods HP, MP, LP. Good

Valves & Gears HP, MP, LP. Good

Connecting Rods, HP, MP, LP. Good

Top Ends & Guides HP, MP, LP. Good

Crankpins & Bearings HP, MP, LP. Good

Journals & Bearings Good

VALVE GEAR

Cyls., Covers, Pistons & Rods

Connecting Rods & Top Ends

Crankpins & Bearings

Journals & Bearings

Coolers & Safety Devices

MAIN ENGINE DRIVEN PUMPS

Cyls., Covers, Pistons & Rods

Connecting Rods & Top Ends

Crankpins & Bearings

Journals & Bearings

Levers

SCAVENGE BLOWERS

SUPERCHARGERS

VALVE GEAR

Cyls., Covers, Pistons & Rods

Connecting Rods & Top Ends

Crankpins & Bearings

Journals & Bearings

Levers

SCAVENGE BLOWERS

SUPERCHARGERS

VALVE GEAR

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32 Essential Independent Pumps (Identify by position) E.R. port:-one(1) General service pump, Two(2) Feed pumps, One(1) Ballast pump. B.R. port fwd:- Two(2) O.F. Burning pumps, one(1) O.F. Transfer pump

33 Bilge, Ballast & Oil Fuel Suction Lines, Fittings & Controls

Good

34 Have the remaining Piping Arrangements & Fittings in the machinery space been examined as considered necessary?

Yes, Good

35 ~~XXXXXXXXXX~~

36 ~~XXXXXXXXXX~~

37 Heaters (state service)

Feed Water Heater (tested, Good)

Oil Fuel Heater (New, not tested)

38 ~~XXXXXXXXXX~~

39 ~~XXXXXXXXXX~~

40 Oil Fuel Tanks (Not forming part of hull structure) New tanks in Engine Room (p & s) tested, Good

41 Evaporators dismantled.

42 ~~XXXXXXXXXX~~

43 Steering Machinery Good

44 Windlass Good

45 Fire Extinguishing Arrangements Good

AUXILIARY ENGINES (Identify by position)

30 KW steam generator engine (E.R. starb'd aft Lower platform) Good

10 KW steam generator engine (E.R. port aft 2nd deck) +

ELECTRICAL EQUIPMENT

46 GENERATORS

47 EXCITERS

48 AIR COOLERS

AUXILIARY EQUIPMENT

49 MOTORS

50 AIR COOLERS

51 CONTROL GEAR, CABLES, ETC.

52 INSULATION RESISTANCE

53 INSULATING OIL TEST

54 OVERSPEED GOVERNORS

55 MAGNETIC COUPLINGS

56 AIR GAP

1 Generators & Governors 30 KW Good
10 KW not tested.

2 MOTORS

3 Switchboards & Fittings For 30 KW Good

4 CABLES

5 INSULATION RESISTANCE Good

6 MAGNETIC COUPLINGS

7 AIR GAP

8 NAVIGATION LIGHT INDICATORS Good

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

MAIN port
centre 26-1-57 Good
starb'd

SAFETY VALVES Good

MOUNTINGS, DOORS & FASTENINGS Good

SAFETY VALVES ADJUSTED TO Sat. 180 lb

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BOILER SECURING ARRANGEMENTS Good

WERE OIL BURNING SYSTEM & REMOTE CONTROLS EXAMINED WORKING IN ACCORDANCE WITH RULES? Yes, good

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Shimonoseki

Continuation of Report No. 665

dated

on the

- 2 -

S.S. "LUCAS TRADER"

Existing cast iron propeller badly corroded and fractured blades at tip and now replaced with new propeller. Particulars are as follows:-

Four bladed Manganese Bronze Solid Propeller

Diameter 17'-6"

Pitch 17'-0"

Area 97 sq.ft.

Mark LLOYD'S Smk

NO. 1253

K.O. E

21-11-56

Thrust block holding down bolts found slack, tightened.

Intermediate shaft bearings worn, remetalled. (Nos. 4 & 5)

ps & Auxiliaries

Two (2) Feed pumps: Steam end piston rods skimmed.

General service pump: Water end rebored and bucket rod skimmed.

30 KW steam generator engine: Piston rod, slide valve rod renewed. Governor valve and spindle renewed.

10 KW steam generator engine: Lub. oil gear pump gears and driving gear wheel found badly worn. Recommended the pump to be completely repaired.

The engine & generator to be examined and tested under full power working condition. The Chief Engineer stated that the repair would be completed and tested when the vessel return to Japan. (due end of March 1957.)

Steering engine: Starboard piston rod renewed.

Windless: Crank shaft badly worn. Crank shaft, two crank pin bearings and eccentric sheaves renewed.

Main Condenser: 27 tubes renewed. Several cracks found between tube holes in the aft tube plate in way of division plate and leaking. Now done holes in way steel screw plugged and screw stop studs fitted on cracks subsequently tested and found tight.

Aux. Condenser: Seven tubes renewed, tested, found tight.

Evaporator At the request of the Owners evaporator dismantled.

Boilers

Port boiler: One port combustion top girder dog stay fractured, renewed.

Front end plate inside slight star cracks in way of upper longitudinal stay of bottom manhole doors found. Cracks veed out and welded.

Centre boiler: Eight (8) small stays fractured or badly worn, renewed.

Starb'd boiler: Two (2) small stays and one internal feed pipe renewed.

Star cracks similar to port boiler found, now dealt with as in port boiler.

Exhaust steam heaters in smoke boxes of all boilers were removed for scrap.

Fuel Conversion

Vessel converted this time to oil fuel burning system. (NATURAL DRAUGHT)

Complete set of oil burning appliances, which was manufactured by Messrs. "TODD OIL BURNERS LTD, LONDON" and tested by the Societys Surveyors and marks have been stamped, installed in good order.

Two oil burning units consisting of two pressure pumps, two heaters, suction and delivery filters. These pumps provided with effective escape valves which are in close circuit. Escape valves fitted on the oil side of the heaters properly adjusted.

(MADE AND PRINTED IN ENGLAND.)

00612/2

P.T.O.

S.S. "LUCAS TRADER"

Piping newly fitted and tested as per Rules and approve plans.

One oil transfer pump with relief valve with close circuit now fitted.

A starting-up oil fuel unit, including hand pump and aux. heater fitted.

Marks found:

Oil Heater	LLOYD'S TEST	5.9.56	RMC	
Oil Burning Pumps	293262 LLOYD'S TESTED	RMC	500 lbs 25.4.56 (NO. 1)	
Size	3 x 4½ x 6		(oil & steam cyl.)	
Glasgow	293247 LLOYD'S TESTED	RMC	500 lbs 25.4.56 (NO. 2)	
			(oil & steam cyl.)	
Oil Transfer Pump	298063 LLOYD'S TESTED	RMC	200 lbs (oil cyl.)	
			500 lbs (steam cyl. space)	

Emergency fire Pump: Separate pump room has been built under bridge deck/in way of aft entrance port side, and oil engine driven volute pump installed, tested and found to be satisfactory.

A 2½" bore sea suction valve (tested) with deck control newly fitted, and necessary foot valve and filter fitted in the suction line and delivery pipe connected to water service fire main.

Particulars are as follows.

Manufacturers:

Engine Russell Newbery & Co. Ltd., Dagenham, Essex, England

Pump Hamworthy Eng. Ltd., Pool, England, NO. 15388-13

LLOYD'S TEST AFG Sou 7.9.56

Two oil fuel settling tanks of 22 tons capacity each fitted in engine room side bunkers (p & s) and suitably stayed. Steam heating coils now fitted in both settling tanks and Nos. 1, 2 and 5 D.B. oil fuel tanks and tested as per Rules and found tight.

Provision made for pumping, sounding and air ventilating of all oil fuel tanks. Funnel damper removed.

Steam smothering installations newly fitted in boiler room and oil fuel settling tank spaces and tested, found satisfactory. Hydrants 4 hoses found good. Sand and other fire extinguishers equipped as per Rules.

Deck controls provided for O.F. settling tank valves, O.F. burning pumps, oil transfer pump and steam smothering, examined and tested and found good.

On completion oil fuel burning system examined under working condition and found satisfactory.

Plans as fitted of oil fuel and steam piping approved herewith.

Electrical Equipment

Necessary junction box and wiring for Emergency fire pump room fitted.

Defective wiring behind switch board made good and fuses renewed.

Interim Cert. (No. C-5379) issued, copy attached.



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Lloyd's Register
Foundation