

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

APR 29 1937

Date of writing Report 28-4-1937 When handed in at Local Office 28-4-1937 Port of Leith
Received at London Office.....

No. in Survey held at Burntisland Date, First Survey 15-2-37 Last Survey 23-4-1937
Reg. Book. (Number of Visits...4.....)

88275 on the S.S. "FULHAM III" Tons {Gross 1593.88
Net 874.43.

Built at BURNTISLAND By whom built BURNTISLAND SHIPBUILDING CO. LTD Yard No. 195 When built 1937

Owners The Mayor, Aldermen & Councillors of the Metropolitan Borough of Fulham. Port belonging to London

Electric Light Installation fitted by BURNTISLAND SHIPBUILDING CO. LTD Contract No. 195 When fitted 1937

Is the Vessel fitted for carrying Petroleum in bulk NO

System of Distribution TWO WIRE LEAD & RETURN

Pressure of supply for Lighting 110 VOLTS volts, Heating — volts, Power — volts.

Direct or Alternating Current, Lighting DIRECT Power —

If alternating current system, state frequency of periods per second —

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off YES

Generators, do they comply with the requirements regarding rating YES, are they compound wound YES

are they over compounded 5 per cent. YES, if not compound wound state distance between each generator —

Where more than one generator is fitted are they arranged to run in parallel —, is an adjustable regulating resistance fitted in series with each shunt field —

Are all terminals accessible, clearly marked, and furnished with sockets YES, are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched YES Are the lubricating arrangements of the generators as per Rule YES

Position of Generators STARBOARD SIDE OF ENGINE ROOM

is the ventilation in way of the generators satisfactory YES, are they clear of all inflammable material YES

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators 4 FEET and —, are the generators protected from mechanical injury and damage from water, steam or oil YES

are their axes of rotation fore and aft YES

Earthing, are the bedplates and frames of the generating plant efficiently earthed BOLTED DIRECT TO EARTH are the prime movers and their respective generators in metallic contact YES

Main Switch Boards, where placed STARBOARD SIDE OF ENGINE ROOM

If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard —

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes YES

are they protected from mechanical injury and damage from water, steam or oil YES, if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards 4 FEET and —

are they constructed wholly of durable, non-ignitable non-absorbent materials YES, is all insulation of high dielectric strength and of permanently high insulation resistance YES

if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework SINDANNO PANEL

and is the frame effectively earthed BOLTED DIRECT TO EARTH Are the fittings as per Rule regarding: — spacing or shielding of live parts

YES, accessibility of all parts YES, absence of fuses on back of board YES, proportion of omnibus bars YES

YES, individual fuses to voltmeter, pilot or earth lamp YES, connections of switches YES

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches ONE 100 AMP

D.P. MAIN SWITCH & FUSES. FOR OUTGOING CIRCUITS 30 AMP. S.P. SWITCHES & 30 AMP. D.P.

FUSES

Instruments on main switchboard ONE ammeter ONE voltmeter — synchronising device for paralleling purposes.

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system EARTH LAMPS

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules YES

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule YES



Lloyd's Register Foundation

Cables: Single, twin, concentric, or multicore SINGLE TWIN are the cables insulated and protected as per Tables IV, V, XI or XIII of the Rules YES.

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 3%

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets YES.

Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound _____

Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage YES.

Support and Protection of Cables, state how the cables are supported and protected SUPPORTED WITH METAL CLIPS SECURED WITH SCREENS. CABLES PROTECTED BY WIRE ARMOUR & LEAD COVERING.

If cables are run in wood casings, are the casings and caps secured by screws _____, are the cap screws of brass _____, are the cables run in separate grooves _____. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII YES.

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements NONE.

Joints in Cables, state if any, and how made, insulated, and protected STANDARD JUNCTION BOXES.

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES.

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed YES state the material of which the bushes are made LEAD.

Earthing Connections, state what earthing connections are fitted and their respective sectional areas METAL COVERING OF ALL CABLES SECURED BY BRASS BONDING CLIPS.

_____, are their connections made as per Rule YES.

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule YES.

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven _____

Navigation Lamps, are these separately wired YES, controlled by separate switch and separate fuses YES, are the fuses double pole YES, are the switches and fuses grouped in a position accessible only to the officers on watch YES, has each navigation lamp an automatic indicator as per Rule YES.

Secondary Batteries, are they constructed and fitted as per Rule _____

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight YES, are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected NONE, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected NONE, how are the cables led _____

_____ where are the controlling switches situated _____

Searchlight Lamps, No. of _____, whether fixed or portable _____, are their fittings as per Rule _____

Are Lamps, other than searchlight lamps, No. of _____, are their live parts insulated from the frame or case _____, are their fittings as per Rule _____

Motors, are their working parts readily accessible _____, are the coils self-contained and readily removable for replacement _____, are the brushes, brush holders, terminals and lubricating arrangements as per Rule _____, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material _____, are they protected from mechanical injury and damage from water, steam or oil _____, are their axes of rotation fore and aft _____, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type _____, if not of this type, state distance of the combustible material horizontally or vertically above the motors _____ and _____

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule _____

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule _____

Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings _____

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office _____

PARTICULARS OF GENERATING PLANT.									
DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.		
		Kilowatts.	Volts.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.	
MAIN	ONE	7.5	110	68.1	500	VERTICAL STEAM ENGINE.			
AUXILIARY									
EMERGENCY									
ROTARY TRANSFORMER									

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rate.			
MAIN GENERATOR	1	.0600	19	.064	33.3	69.0	18	RUBBER	L.C. & W.A.
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER MOTOR GENERATOR									
ENGINE ROOM	1	.0045	7	.029	7	17.5	14	RUBBER	L.C. & W.A.
BOILER ROOM									
AUXILIARY SWITCHBOARDS									
ACCOMMODATION SALOON	1	.0070	7	.036	12.5	22	360	RUBBER	WIRE ARMOUR
" ENGRS.	1	.0045	7	.029	12.0	17.5	98	"	"
NAVIGATION	1	.0030	3	.036	1.8	12.0	360	"	"
RADIO TELEPHONE	1	.0070	7	.036	NOT FITTED		360	"	"
WIRELESS									
SEARCHLIGHT									
MASTHEAD LIGHT	1	.0020	3	.029	.36	7.8	160	RUBBER	WIRE ARMOUR
SIDE LIGHTS	1	.0020	3	.029	.36	7.8	66	"	L.C.
COMPASS LIGHTS	1	.0020	3	.029	.36	7.8	30	"	"
POOP LIGHTS									
CARGO LIGHTS									
ARC LAMPS									
HEATERS									

MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rate.			
BALLAST PUMP										
MAIN BILGE LINE PUMPS										
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP										
SANITARY PUMP										
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS										
AIR COMPRESSOR										
FRESH WATER PUMP										
ENGINE TURNING GEAR										
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP										
WINDLASS										
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR										
(a) MOTOR GENERATOR										
(b) MAIN MOTOR										
WORKSHOP MOTOR										
VENTILATING FANS										

All Conductors are of annealed copper conforming to British Standard Specification No. 7.
 The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.
 The foregoing is a correct description.

For THE BURNTISLAND SHIPBUILDING CO., LTD.

Electrical Engineers. Date 26-4-37.

[Signature]
 CHAIRMAN AND MANAGING DIRECTOR

COMPASSES.

Distance between electric generators or motors and standard compass 145'-0"
 Distance between electric generators or motors and steering compass 140'-0"
 The nearest cables to the compasses are as follows:—
 A cable carrying 30 Ampères 7" feet from standard compass 7" feet from steering compass.
 A cable carrying Ampères feet from standard compass feet from steering compass.
 A cable carrying Ampères feet from standard compass feet from steering compass.
 Have the compasses been adjusted with and without the electric installation at work at full power YES.
 Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted YES.
 The maximum deviation due to electric currents was found to be NIL degrees on ANY course in the case of the standard compass, and NIL degrees on ANY course in the case of the steering compass.

For THE BURNTISLAND SHIPBUILDING CO., LTD.

[Signature] Builder's Signature. Date 26-4-37.
 CHAIRMAN AND MANAGING DIRECTOR

Is this installation a duplicate of a previous case YES If so, state name of vessel "FULHAM I" & "FULHAM II"

General Remarks (State quality of workmanship, opinions as to class, etc.) This installation has been efficiently fitted on board in accordance with the rules. The materials and workmanship are sound and good and the installation was found satisfactory under full load and working conditions.

*Noted
 HRW
 29.4.37*

Total Capacity of Generators 7.5 Kilowatts.

The amount of Fee £ 8 : 0 : 0 When applied for, 28-4-19 37.
 Travelling Expenses (if any) £ 15 : 5 : 18/5 When received, 28/5

[Signature]
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 30 APR 1937

Assigned See Lth 36 19318

2m.3.31.—Transfer
 The Surveyors are requested not to write on or below the space for Committee's Minutes.